User Guide

Digital Living System™
VGX-XL2A

SONY

VAIO® VGX-XL2A Disclaimers, Notes, Warnings

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Chapter 1:
Getting Started

Introduction

Welcome to the VAIO® VGX-XL2A Digital Living System™ User Guide. You can download updated user guide information by opening VAIO® Support Central and selecting Documentation. This guide contains the following information:

- Chapter 1: Getting Started
- Chapter 2: Setting Up Your VGX-XL2A DLS System
- Chapter 3: Hardware Upgrades & Maintenance
- Appendix A: Wireless Local Area Networks
- Appendix B: VAIO Media™ Software: Wirless Local Area Networks
- Appendix C: Setting Up Digital TV
- Appendix D: Hard Disk Drive Recovery
- Appendix E: RAID Configuration
- Appendix F: Troubleshooting
- Appendix G: Program Support

What is the VGX-XL2A Digital Living System?

The **VGX-XL2A DLS** system is a powerful computer designed with the livingroom and your digital entertainment needs in mind. Add a CD/DVD changer or other perpherial devices, and it become the host for a state of the art home entertainment system. Let the **VGX-XL2A DLS** system lead you into the exciting world of VAIO® where new technologies are established for digital content management.

Product Specifications

VGX-XL2A Personal Computer

For complete hardware specifications, go to VAIO® Support Central and select Product Specifications. [**Start > All Programs > VAIO Support Central**]

Operating System Software

The operating system for the VGX-XL2A Digital Living System™ is Microsoft® Windows® XP Media Center Edition 2005, with Update Rollup 2. VAIO value-added software provides you with additional features and PC capabilities and when teamed with Media Center, provides you with an even greater entertainment value.

Note: Even though the digital entertainment features of the VGX-XL2A computer are designed to work through Media Center, the features can also be accessed through independent software applications pre-installed on XL2A computer. For a listing of these and other pre-installed application, see **Sony Original Software** and **Other Software Applications**.

Microsoft® Windows® Media Center Edition 2005

The following list contains a high-level overview of the features available to you in Media Center. For in-depth information about each feature, go to the specific topic in the VGX-XL2A Digital Living System™ Entertainment Guide included with the packaging materials.

Feature	Description
Play DVDs	Insert a DVD movie into the optical drive slot to view the movie or review specific movie information.
Online Spotlight	The Online Spotlight provides Internet access to the latest entertainment news and events.
My Pictures	Categorize your pictures in as many folders as you wish. Then, select a group to view a single picture or a slide of all pictures in the folder.
My TV	Take control of your TV viewing experience. Watch live TV or record your favorite show for later viewing.
My Music	Enjoy access to all the music stored on your hard drive. Organize, locate, and play your favorite music files in Media Center.
Create DVD	Create DVDs from your favorite recorded TV series. Select only the episodes you want to burn to DVD. **IMPORTANT**: Sony supports the lawful use of technology and does not endorse or encourage the use of our products for purposes other than those permitted by copyright law. TV programs and commercial DVDs that have been encrypted (protected) by the broadcaster cannot be copied and played back on any player other than the one recorded to.
More Programs	To enhance you entertainment experience, links have been included to additional programs for your enjoyment.
Settings	Set your personal preferences for your digital entertainment experience. Review this section carefully

Sony Original Software

The following Sony original software programs can be accessed by selecting Windows **Start > All Programs > [application name]**. For additional information about a specific application, start the application and go to the **Help** file.

- **Click to DVD™** - DVD Creation
- **SonicStage® Mastering Studio™** - Audio Mastering & Re-Mastering
- **DVgate Plus™**- Digital Video

  Note: Due to the constraints of using Component Video, DVgate Plus will only open at 1080i resolutions.

- **SonicStage®** - Digital Music
- **VAIO Media™** - Network File Sharing
- **Image Converter** - PSP™ (Play Station® Portable) hand held entertainment system

Other Software Applications

The following Sony original software programs can be accessed by selecting Windows **Start > All Programs > [application name]**. For additional information about a specific application, start the application and go to the **Help** file.

- **Adobe® Photoshop® Album Starter Edition** - Photo Viewing and Organizing
- **Adobe® Premiere® Standard Edition** - Basic Video Mastering and Editing Tool from Adobe®
- **Adobe® Photoshop® Elements** - Basic Photo Editing tool from Adobe®
- **Microsoft® Works 8.5** - Word Processing, Spreadsheet, Calendar, Scheduling, Contact Management, and Database
- **Microsoft® Office 2003** 60-Day Student/Teacher Edition Trial[1]

1. The Microsoft Office 2003 60-Day Trial software is intended for evaluation purposes only. This trial software is installed on your system and you must activate the software before you can use it. Product activation procedures will be detailed during initial launch of the software; activation requires Internet access. This software has an expiration date of 60 days from date of first use, at which time the software will operate under reduced-functionality mode, limiting end-user options and operations.

- **Intuit Quicken® 2005 New User Edition** (Previous Quicken Users may require additional upgrade)
- **InterVideo® WinDVD®** - For DVD Playback
- **Roxio® DigitalMedia SE** - For Data DVD and CD Creation

Anti-virus and Recovery Software

- **Norton® Internet Security™** 60-Day Subscription - Norton AntiVirus®, Norton Personal Firewall, Norton Privacy Control, Norton AntiSpam®, Norton Parental Control

  Note: For additional information about Norton Security products, go to http://www.symantec.com

- **VAIO® Recovery Wizard**
- **VAIO® Control Center**
- **VAIO® Update**

Getting to know the VGX-XL2A DLS System

Unpacking the VAIO XL2A Personal Computer

Make sure you have the following items:

VGX-XL2A PC	Wireless Keyboard w/Intergrated Pointing Device	
WLAN Antenna	Power Cord	Infrared Blaster Cable
HDMI™ Cable	Optical S/PDIF Cable	Keyboard Batteries (4)
Remote Batteries (2)	HDMI™ to DVI-D Adapter	

Keep all packaging material in case you need to move or ship the XL2A computer at a later time.

Wireless Keyboard

Setting up the Keyboard

Insert the Batteries

On the back of the Keyboard, remove the battery compartment cover and insert four (4) Alkaline AA batteries (supplied) oriented as shown in the battery compartment. Replace the battery compartment cover.

Activate Wireless Keyboard Communication

Before using the keyboard, you must activate communications between the DLS computer and the wireless keyboard w/integrated pointing device.

To activate wireless keyboard communications

Make sure there are no obstructions between the XL2A computer and the wireless keyboard when activating communications.

1. On the front of the keyboard, slide the Power button to **On**.
2. On the back of the keyboard, slide the Point Device button to **On**.
3. On the back of the keyboard, and the front panel of the XL2A computer, press the connect buttons simultaneously and hold for a few seconds.
4. Test the keyboard and the point device to make sure both are functioning properly.

VAIO® Remote Control

Setting Up the Remote Control

1 Start **MY TV**, **MY MUSIC**, **MY PICTURES**, **MY VIDEO** in Media Center. Press **STANDBY** to place your computer in Standby mode.

2 Control the playback for **TV**, **MUSIC**, **VIDEOS**, and ends a slide show. Buttons include: **STOP**, **PAUSE**, **FWD**, **SKIP**, **REPLAY**, **REW**, and **RECORD**. The right arrow button serves as a **PLAY** button.

3 Use the arrow buttons to move to a specific location, the **OK** button to make your selection, the **BACK** button to go to the previous screen, and the **MORE** button to view additional information.

4 Use the **START** button to open Media Center. Volume Controls (VOL) are on the left and **Channel** (CH) or **Page** (PG) on the right of the **START** button. A **MUTE** button is also provided to suppress sound.

Follow the steps below to preset the MCE remote control for TV volume.

1. Locate the input code number by selecting your specific manufacturer.
   MCE (RC6) Default: 01
   Sony: 02
   Samsung: 03,05,06,08,11 or 13
   Toshiba: 07 or 09
   Panasonic: 04 or 10
   Sharp: 07 or 12
2. On the remote control, press and hold the OK button. Then type the input code no.

5 Open the following screens **RECORDED TV**, **GUIDE**, **LIVE TV**, **DVD MENU**. (**DVD MENU** is available only when Media Center is active.)

6 Use these buttons to change channels and enter text or numbers in a specific location.

Insert the Batteries

On the back of the remote control, remove the battery compartment cover and insert two (2) Sony Super Manganese Alkaline batteries (supplied) oriented as shown in the battery compartment. Replace the battery compartment cover.

Note: When using the VAIO® remote control, remember to point the remote at the VGX-XL2A personal computer, not at the TV or monitor.

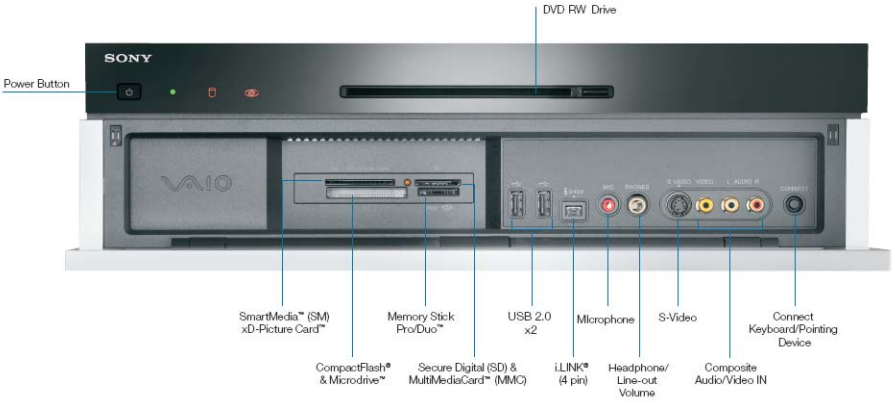
About the Keyboard and Remote Control Batteries

When replacing batteries, the remote and keyboard will use any alkaline batteries. Please use the "same" kind of new batteries from the same "manufacturer." Mixing new batteries and used batteries, and mixing different kinds of batteries (combination of manganese batteries and alkaline batteries, etc.) can cause "leaking and damage".

Help Hints

- Turn the POWER switch "OFF" if you will not be using the keyboard for a while. Also, please take the batteries out if you will not be using the keyboard for a long time.
- The capacity of the batteries in the keyboard can be checked using the battery indicator located on the upper right of the keyboard.
- Replace the batteries when they get low. If you leave the batteries in the device even when the batteries are dead, it may cause leaking.
- Replace with new batteries after cleaning the liquid when liquid leaks from the batteries.
- Use regular batteries. Re-chargeable batteries are not supported.
- Use alkaline batteries for the keyboard.

XL2A Personal Computer Front Panel



The XL2A Personal Computer Front Inputs and Outputs

Power Button

Press to turn on the power to this device. If you press this button during the operation of this device, it will enter a hibernation state and the power lamp will be turned off

Power Lamp

The power lamp turns green when the electric power to this device is turned on. The power lamp blinks orange when it is in Away mode, and turn orange when it is in Standby mode.

(Hard Disk) Access Lamp

The access lamp blinks orange when you read or write data by accessing the disc or hard disc.

WLAN (wireless Lan lamp

The wireless LAN lamp turns green when the wireless LAN[1] is ready to be used.

DVD-RW Combo Drive (Double layer recording capable) [2]

It will read data from DVD-ROM, DVD+R DL, DVD+R, DVD+RW, DVD-R DVD-RW, CD-ROM, CD-R, CD-RW and write data to DVD+R DL, DVD+R DVD+RW, DVD-R, DVD-RW, CD-R, CD-RW.

Eject button

Press when the disc is to be removed from the drive.

SmartMedia™ (SM) xD-Picture Card™ memory card reader

Reads and writes data from and to SmartMedia or xD-Picture Card media.

Memory card access Lamp

It blinks orange when you read or write data from a "Memory Stick®", xD-Picture Card, Smart Media, Compact Flash, or SD memory card.

CompactFlash® & Microdrive™ memory card reader

Reads and writes data from and to CompactFlash and Microdrive media.

Memory Stick Pro™/Memory Stick Duo™

Data from the "Memory Stick®" is read and written.

Secure Digital (SD) & MultiMediaCard™ (MMC) memory card reader

Data from the SD memory card is read and written.

USB (Universial Serial Bus) Connector (x2)

Connects to a device which supports the USB standard.

The connector supports the USB 2.0 standard and can also be connected to a device which supports the USB 1.1 standard.

i.LINK®[3] S400 port (IEEE 1394 connector (4 pin)

Connects to an i.LINK® supported device.

S-VIDEO (S video input)

Connection for an S-Video cable.

Composite Audio/Video IN

Connection for an Audio/Video cables.

Connect Keyboard/Pointing Device

Use this button when activating the wireless keyboard/pointing device.

1. Requires compatible wireless access point(s). Some features may rely on Internet services which may require a fee.
2. DVD Media/Formats are not universally compatible.

3. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connection for information on compatibility, operating conditions and proper connection. For information on any Sony device having an i.LINK connection, contact Sony at 1-800-686-7669.

Using Memory Cards and Memory Card Readers

This section provides basic information about using your computer's installed memory card readers and includes the following information:

- About Your Memory Card Readers
- About Memory Stick® Media
- Inserting a Memory Card
- Removing a Memory Card
- Sharing Memory Cards

About Your Memory Card Reader

Your VAIO® computer is equipped with memory card readers that are compatible with many popular types of memory cards. You can use your computer's memory card readers to transfer data between digital cameras, camcorders, music players, and other audio/video devices.

Supported Memory Card Readers and Compatible Media

Smart Media™

xD-Picture Card™

Secure Digital (SD)

MultiMediaCard™

Compact Flash®

Microdrive™

Memory Stick Duo™

Memory Stick®

Memory Stick Pro™

About Memory Stick Media

Memory Stick® media are a compact, portable, and versatile data storage media designed for exchanging and sharing digital data with compatible devices. The following types of Memory Stick® media are available, but compatibility with your computer can vary.

- **MagicGate™ Memory Stick® Media** - Provides copyright protection with authentication and encryption, using Sony® MagicGate technology. Authentication ensures that protected content is only transferred between compliant devices and media. Protected content can be recorded and transferred in an encrypted format that prevents unauthorized duplication or playback. You can store different data formats on a single Memory Stick media.
- **Memory Stick Pro™ media** - Provides MagicGate copyright protection and high-speed data transfer features when used with compatible Memory Stick PRO devices. VAIO® computers support Memory Stick PRO media for data storage purposes only. High-speed data transfer and MagicGate technology features, such as authentication and encryption, may not be available. You can store different data formats on a single Memory Stick media.
- **Memory Stick Pro Duo™ media** - Provides the same features and benefits of Memory Stick PRO™ media, in a form that is 1/3 smaller in size.
- **Memory Stick® media** - Provides data storage only. The Memory Stick media does not provide MagicGate technology or high-speed data transfer. You can store different data formats on a single Memory Stick media.
- **Memory Stick Duo™ media** - Provides the same features and benefits of MagicGate™ Memory Stick media, in a form that is 1/3 smaller in size.

Compatibility between software programs and Memory Stick® media formats may vary. At this time, Sony suggests using only MagicGate Memory Stick media to store and transfer any data created with SonicStage® software.

Visit the Sony online support Web site at http://www.sony.com/pcsupport regularly for the latest information on Memory Stick® media.

Note: Memory Stick media do not support AVI file playback directly from the media. Copy the video file to your hard disk drive and then play back the file.

Inserting a Memory Card

The memory card reader(s) are located behind a protective cover on the front of the computer. To access the Memory Card Readers, flip the front cover down.

To insert Memory Cards

1. From the front panel, locate the appropriate reader(s) for the memory card(s) you want to use.
2. Insert the memory card into the reader, in the direction indicated of the arrow on the media. Do not force the card into the reader.

Note: If the memory card does not go in easily, gently remove the card and verify you are entering the card in the proper direction.

To Protect data on Memory Stick® Media

Some Memory Stick® media are equipped with a write-protect tab*. The write protect tab prevents accidental changes to information recorded on your Memory Stick media. When you slide the write-protect tab to the **LOCK** position, your Memory Stick® media is write-protected. You cannot delete, copy, or save information on the media while the write-protect tab in the **LOCK** position. When you slide the tab to the **un-LOCK** position, you can write to or modify your Memory Stick media's contents.

Locking the Memory Stick®

If your computer stops recognizing your Memory Stick® media, you may have removed the media from the Memory Stick drive before the data access process completed. If this occurs, follow these steps:

1. Remove the Memory Stick® media from the slot.
2. Shut down your computer, closing any open software programs, and then turn your computer off.
3. Wait approximately 30 seconds, and then restart your computer.

Your computer recognizes the Memory Stick® media, when you insert it into the Memory Stick slot again.

Removing a Memory Card

The correct way to remove a memory card from a memory card reader varies, depending upon the media, reader, or computer model. Use care when removing a memory card to avoid damage to the reader or card.

Note: Do not remove a media card while the media access indicator light is on. The card or its data may be damaged.

To remove a Memory Stick® media, Secure Digital (SD), MultiMediaCard™, SmartMedia™, or xD-Picture Card™ media

1. Press the extended part of the memory card, causing it to extend out from the reader's slot.
2. When the card extends, carefully remove it.

To remove a CompactFlash® media†

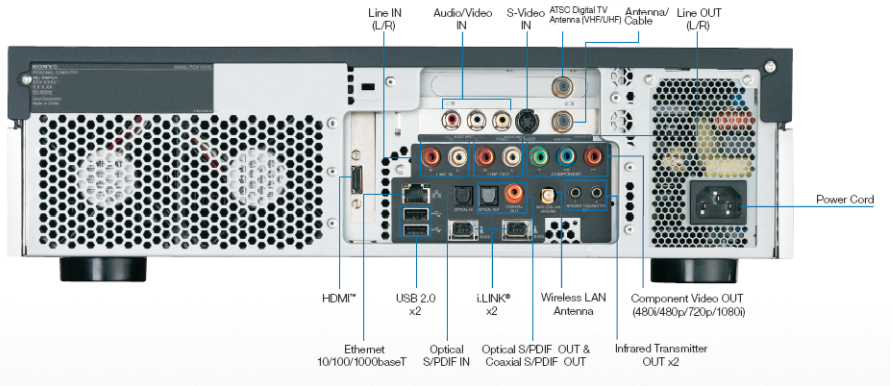
1. Firmly grasp the extended part of the memory card.
2. Pull to remove from the reader.

Sharing Memory Cards

If you plan to share your memory card between your VAIO® computer and devices such as a digital camera or music player, the card must be formatted properly. Follow the steps below to format your memory card.

1. Format the memory card by using it in the device first. See the information supplied with the device for details how to format the memory card.
2. If your device does not recognize memory card that has been formatted by your computer, so the following:
   - Save the card's contents to your hard disk drive.
   - Reformat the memory card using the device, not your computer.

XL2A Personal Computer Back Panel



The XL2A Personal Computer Back Inputs and Outputs

Line IN (L/R)

Connection for an external device.

Audio/Video IN

Connection for an Audio/Video cable to bring signal to the XL2A computer.

S-Video IN

Connection for an S Video cable.

ATSC Digital TV Antenna (VHF / UHF)

Connection for over-the-air digital antenna.

Antenna/Cable

Connection for cable provider or external antenna.

Line OUT (L/R)

Connection for an external device.

HDMI™

Connection for HDMI cable for high definition video and/or sound for TV.

Ethernet 10/100/1000baseT

Connection for a 10BASE-T/100BASE-TX/1000BASE-T Ethernet.

(The port marked with the Network symbol is for LAN connections only.)

USB 2.0 (x2) Universal Serial Bus

Connects to a device which supports the USB standard.

The connector supports the USB 2.0 standard and can also be connected to a device which supports the USB 1.1 standard.

Optical S/PDIF IN

Connection for Audio In.

i.LINK®[1] (x2)

Your VAIO® computer is equipped with one 4-pin (front panel) and two 6-pin (back panel) i.LINK® ports. A 4-pin i.LINK port cannot supply power to a connected i.LINK® device. A 6-pin i.LINK port can supply power (10V to 12V) to a connected i.LINK® device, if the device is equipped with a 6-pin connector.

Optical S/PDIF OUT & Coaxial S/PDIF OUT

Connections for Audio Out.

Wireless LAN Antenna

Connection for Wireless LAN Antenna.

Infrared Transmitter OUT (x2)

Controls VCR, Setup box, and other devices in MCE.

Component Video OUT (480i, 480p,720p)

Connections for Video Out.

Power Cord

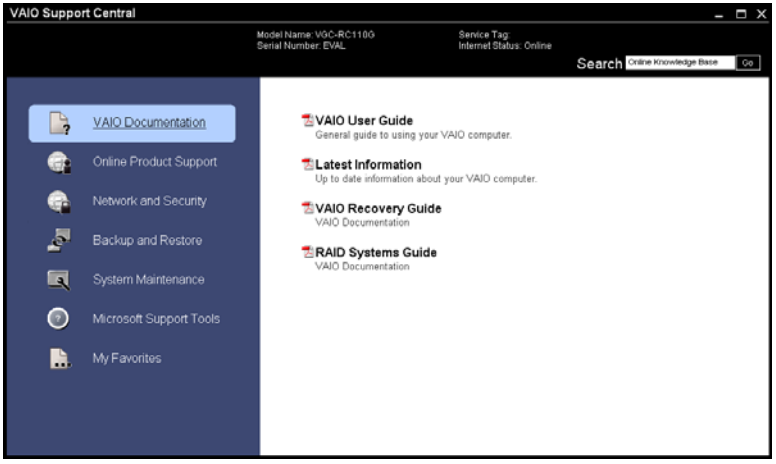
Connection for supplied power cord.

1. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connection for information on compatibility, operating conditions and proper connection. For information on any Sony device having an i.LINK connection, contact Sony at 1-800-686-7669.

Support Resources.

VAIO® Support Central

VAIO® Support Central provides you with a single location for all of your support needs and allows you to easily access valuable support and technical information from Sony and Microsoft.



Keep your VAIO® computer's system software and operating system updated using **VAIO Web Support** and **Microsoft Update**.

Note: You must be connected to the Internet to access some of the VAIO Support Central features.

Please carefully review all support options in **VAIO Support Central**.

To access VAIO® Support Central

1. Using your wireless keyboard w/integrated pointing device, select the Windows **Start** button.
2. From the Start menu, select **All Programs**.
3. From the All Programs menu, select **VAIO® Support Central**.

Note: To access the most updated information available for the VGX-XL2A Digital Living System, periodically go to **VAIO® Support Central > Documentation** and select the **VGX-XL2A DLS User Guide**. This guide will updated on an ongoing basis for your convenience.

Documentation

The following support documents for the VAIO® VGX-XL2A Digital Living System™ are available in VAIO® Support Central.

Online User Guide: The online user guide is designed to provide you with detailed information about the VGX-XL2A Digital Living System™ product.

Note: The Online User Guide will be updated on an ongoing basis for your convenience. Please return to VAIO Support Central > Documentation periodically to download updated User Guide information.

Safety Information

Carefully read the VGX-XL2A Safety Information Guide. The guide, in printed format, is contained in the packaging materials and can also be access from VAIO Support Central by selecting Documentation.

Additional Notes

The wireless LAN function

The wireless LAN[1] that comes equipped in this device is certified to comply with the "Wi-Fi specifications" under the provisions of the WFA (Wi-Fi Alliance.)

Security when using wireless LAN devices

It is very important to set up security on the wireless LAN.

Important Note: Sony will not be held responsible for damages resulting when security measures are not taken, or when security problems occur due to the circumstance outside of the wireless LAN specifications.

Refer to **Appendix A: Wireless Local Area Network** in this guide for more details.

Copy protection

You can not use this device for recording of content for other than your personal enjoyment without the copyright holders permission under the copyright law.

It is necessary to obey the copyright law and permitted usage conditions for each copyrighted work and for making multiple copies of copyrighted works. It is prohibited to make copies or use, change, delete or make other revisions to or alter the integrity of captured video, images, or audio without the copyright owners permission.

Summary

Chapter 1: Getting Started provided you with an overview of the VGX-XL2A Digital Living System™ including hardware, operating system, and additional value-added VAIO® software.

1. Requires compatible wireless access point(s). Some features may rely on Internet services which may require a fee.

Chapter 2:
Setting Up the DLS System

Before You Begin

Before setting up your VGX-XL2A Digital Living System™, consider the environment in which it will be placed. Listed below are some general guidelines.

- The maximum distance between XL2A computer and the keyboard can be up to 30 ft.
- Placing the keyboard near a metallic object may affect communication between the keyboard and the computer.
- Do not set up the VGX-XL2A DLS in the following locations:

  - in direct sunlight
  - near a magnet or a item that generates a magnetic field
  - areas with high heat, such as near a heater
  - areas with excessive heat, dust, and humidity
  - areas with poor ventilation

Please observe the following items to avoid damage.

- Always turn off the power before the device is moved. Damage may be caused to the hard disk if the device is transferred or moved with the power on.
- Do not tip or hit this device. Even a small impact or vibration may cause some damage to your hard disk.
- Do not set up where it is not secure.
- Do not place an object over the ventilation holes.
- If the XL2A computer is placed in an enclosed entertainment cabinet, make sure there is sufficient airflow.

Step 1: Connecting the XL2A Computer and a CD/DVD Changer/Recorder

If you have purchased a CD/DVD changer, connecting the changer to the computer is a simple process requiring only a single cable.

Using the supplied i.LINK®[1] cable, connect the end without the node to an i.LINK® connector on the back panel of the XL2A computer, and the end with the node to an i.LINK® connector on the back panel of the changer.

Step 2: Connecting your TV

You can receive analog and digital TV signal transmissions using with the following connections:

HDMI™ Connector

If your TV has a HDMI™ connector, use the supplied HDMI™ cable and connect one end to your TV and the other end to the HDMI™ connector on the back panel of the DLS computer.

DVI-D Connector

If your TV has a DVI-D connector, use the supplied HDMI cable and the HDMI™ to DVI-D adapter. Insert the adapter into the DVI-D TV/monitor. Then using the supplied HDMI™ cable, connect one end of the cable to the adapter and the other end to the HDMI™ connector on the back panel of the XL2A computer.

Component Connectors (Y, Pb, Pr)

If your TV has component connectors, use a component video cable (not supplied) and connect one end to the corresponding video outputs on your TV and on the back panel of the XL2A computer. In this type of connection, there will be separate audio connections.

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1. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connection for information on compatibility, operating conditions and proper connection. For information on any Sony device having an i.LINK connection, contact Sony at 1-800-686-7669.

Additional Notes:

- If your TV has a HDMI™ connector and a DVI-D connector, Sony recommends using the HDMI™ connector.
- The HDMI cable carries both video and audio signals.
- You cannot use HDMI™ and Component Video connections at the same time.
- If device drivers other than the ones provided by Sony are used, the image may not be displayed and the audio may not be heard. Always use the device driver provided by Sony for any updates.
- You can connect the HDMI™ out to an A/V receiver/amp and audio will be heard through the AV amp and then another HDMI™ cable can be connected from the AV amp to the TV for the display. (Some protected video content may not display with this type of connection. A direct connection is advised.)

VHF/UHF Connector (for Receiving Digital TV Transmission

If you have an antenna for receiving the over-the-air signals transmitted by a digital TV broadcasting system, you can connect it to receive these signals for digital televisions, for example high definition TVs. Refer to the “Connecting to an Antenna (air) for Digital Television System (ATSC Signal Standard)” in the next section for more information.

Additional TV Connections

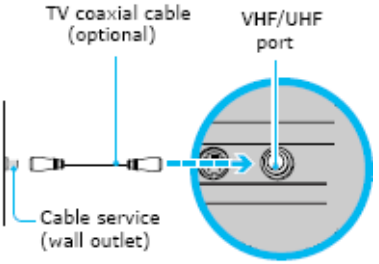
Note: Your VAIO® XL2A computer is supplied with certain video cables. Depending on your in home cable access, you may require extra cables, adapters or connection equipment not supplied with your computer.

Connecting to standard cable access (CATV)

Option 1

1 Connect one end of the TV coaxial cable (optional) to your cable service access.

2 Connect the other end of the TV coaxial cable to the VHF/UHF port on the back panel of your computer.

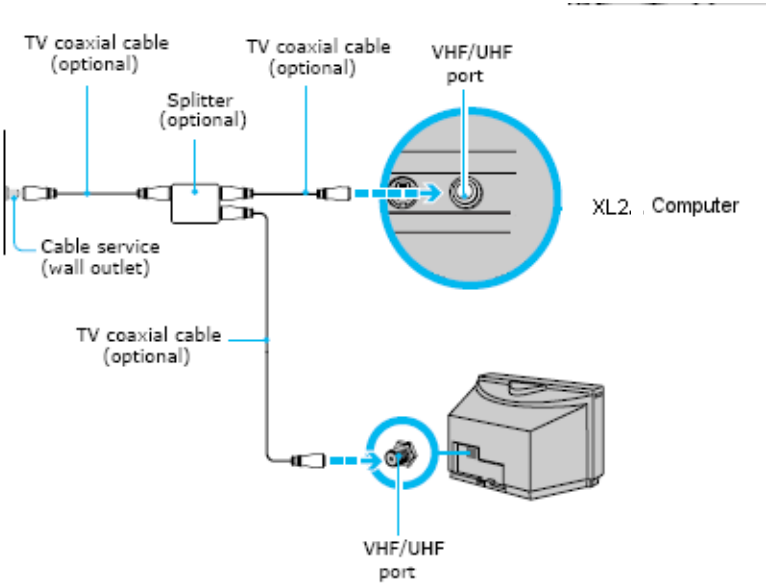


Option 2

1 Connect one end of a TV coaxial cable to your cable service access. Connect the other end to the single-connection side of a splitter adapter.

2 Connect a second TV coaxial cable (optional) to the double-connection side of the splitter adapter. Connect the other end to the VHF/UHF port on the back panel of your computer.

3 Connect a third TV coaxial cable (optional) to the double-connection side of the splitter adapter. Connect the other end to the VHF/UHF port on the back of your TV monitor or display.



Connecting to a Standard Antenna (air) System

You can connect your computer to an indoor/outdoor antenna system, using Option 1 or 2 from the previous section, “Connecting to standard cable access (CATV).” The antenna system in your home may require a VHF/UHF RF combiner/transformer (optional) to connect your computer and the indoor/outdoor antenna system.

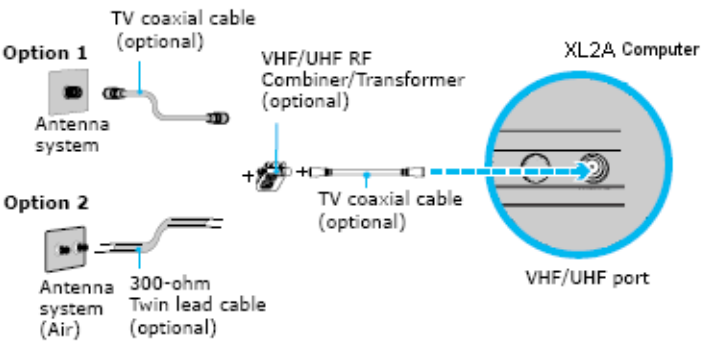
Option 1

1. Connect one end of a TV coaxial cable (optional) to your antenna outlet. Connect the other end to a VHF/UHF RF combiner/transformer (optional).
2. Connect a second TV coaxial cable (optional) from the combiner/transformer to the VHF/UHF port on the back panel of the XL2A Computer.

Option 2

1. Connect both ends of the antenna’s twin lead cable to the screw-type grips on the combiner/transformer.
2. Connect the TV coaxial cable (optional) from the combiner/transformer to the VHF/UHF port on the back panel of your computer.

If you are connecting to an indoor/outdoor antenna system, you may need to re-orient the antenna for better reception.

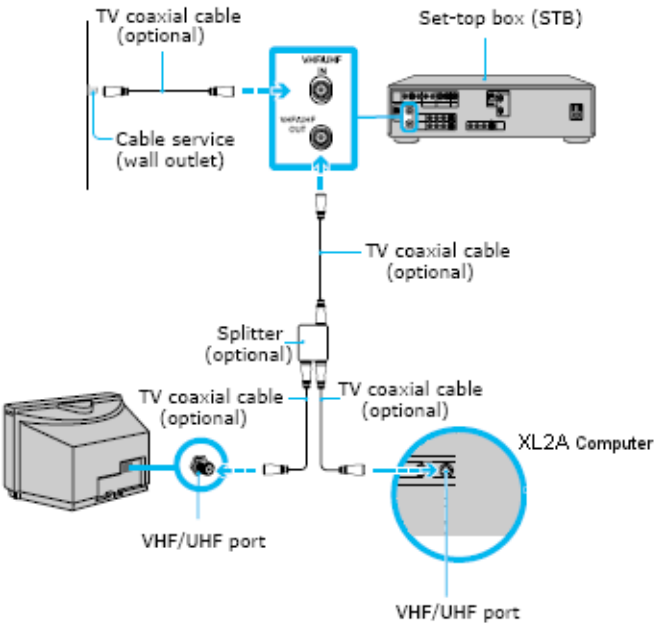


Connecting a Cable or Satellite Set-top Box

You can connect your computer to cable or satellite service that requires a set-top box.

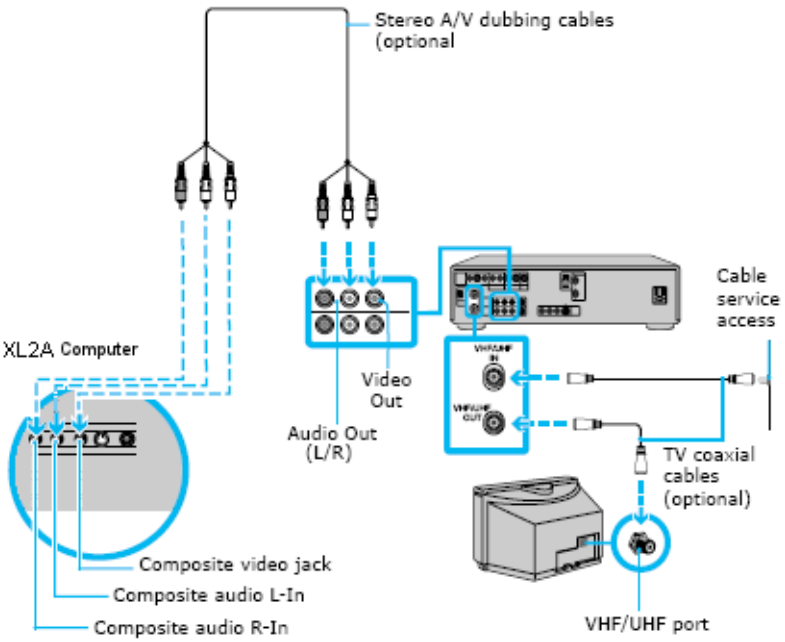
Option 1

1. Connect one end of a TV coaxial cable (optional) to your cable service access. Connect the other end to the In jack on the back panel of your set-top box.
2. Connect a second TV coaxial cable (optional) to the Out jack on your set-top box. Connect the other end to the single-connection end of a splitter adapter (optional).
3. Connect a third TV coaxial cable (optional) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the back panel of your computer.
4. Connect a fourth TV coaxial cable (optional) to the double-connection end of the splitter adapter. Connect the other end to the VHF/UHF port on the rear of your TV monitor or display.



Option 2

1. Connect one end of the TV coaxial cable (optional) to your cable service access. Connect the other end to the In jack on the back panel of your set-top box.
2. Connect a second TV coaxial cable (optional) to the Out jack on your set-top box. Connect the other end to the VHF/UHF port on the rear of your TV monitor or display.
3. Connect one end of a stereo A/V dubbing cable with triple RCA plugs (optional) to the Video-Out and Audio-OUT (L/R) jacks on the back panel of your set-top box, matching the plug and jack colors.
4. Connect the other ends of the stereo A/V dubbing cable into the Audio Input-L, Audio Input-R, and Video Input jacks on the back panel of your computer, matching the plug and jack colors.



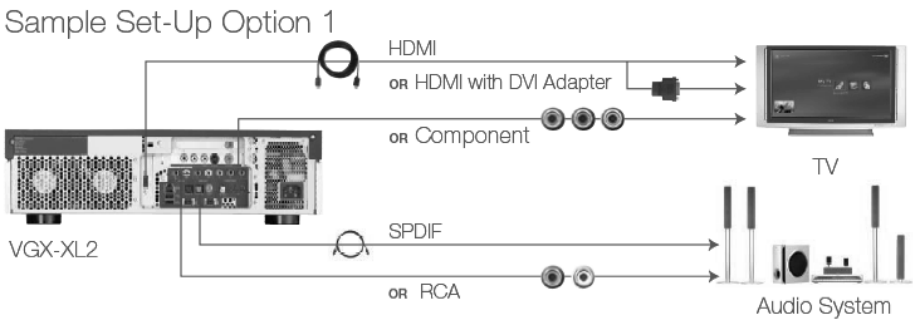
Connecting to an Antenna (air) for Digital Television System (ATSC Signal Standard)

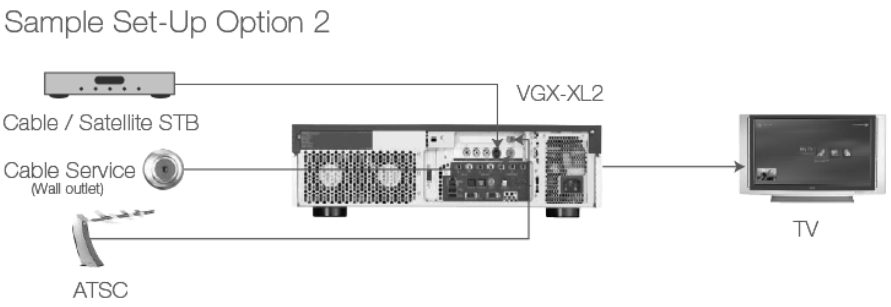
You can connect to receive over-the-air signals that meet the The Advanced Television Systems Committee (ATSC) Signal standard intended for digital televisions, for example high definition TVs.

ATSC is the group that helped to develop the new digital television standard for the United States and other countries. It is intended to replace the earlier analog-type television system standard and produce wide screen 16:9 images up to 1920×1080 pixels in size—more than six times the display resolution of the analog standard. However, a host of different image sizes are supported, so up to six standard-definition “virtual channels” can be carried in a single broadcast. ATSC also boasts “theater quality" audio because it uses the Dolby Digital (AC-3) format to provide "5.1" surround sound. Numerous auxiliary data services can also be provided.

The ATSC system supports a host of different display resolutions and frame rates.The formats below list fthe supported rame/field rates and lines of resolution:

- Standard Definition television (SDTV): 480i60, 480p24, 480p30, 576i50, 576p25
- Enhanced-definition Television (EDTV): 480p60, 576p50
- High-definition television (HDTV): 720i50, 720i60, 720p24, 720p25, 720p30, 720p50, 720p60, 1080i50, 1080i60, 1080p24, 1080p25, 1080p30.





Refer to Appndix C for setting up digital TV functionality using Microsoft® Media Center.

Step 3:Connecting your Home Theater / Speakers

Two-channel sound system

If your sound system has two channels, use the LINE OUT (L) (R) on the back panel of the DLS computer and the LINE IN composite audio connectors on your speakers/receiver.

More than two-channel sound system

If your sound system has more than two channels, use the supplied optical S/PDIF cable and connect one end to the S/PDIF OPTICAL OUT connector on the back panel of the DLS computer and the other end to the OPTICAL IN connector on your sound system. You can also use a coaxial S/PDIF connection when connecting a multi-channel sound system.

Additional Notes

- An optical/coaxial connection will provide a higher quality output than a composite connection.

Configuring software for your speaker system

When using a multiple channel speaker system, certain software programs require setting changes to make certain you have proper audio performance.

Your computer's factory default settings for audio can be changed using the Media Center Settings feature. You can switch between 2-channel, 6-channel, or S/PDIF output modes.

To change speaker settings, do the following:

This procedure will demonstrate how to set up 5.1 surround sound speakers. Your selections may differ depending on your type of speakers.

1 From the Media Center Start menu, select **Settings > General > Media Center Setup, Set Up Your Speakers**.

The Speaker Setup screen displays.

Speaker Setup
MediaCenter
Welcome to Speaker Setup
You will now configure your PC to work with your speakers. During this module you will:
• Specify how many speakers you have
• Test your speakers
Next
Cancel

2 Select **Next**. The Choose number of speakers screen displays.

3 Select **5.1 surround speakers**. The Speaker Connection Type screen displays.

4 Select the appropriate connection type. Your selection depends on the type of cable used to connect your 5.1 surround sound speakers. Select **Single RCA (digital)** for coaxial S/PDIF or **Toslink (digital)** for optical S/PDIF and HDMI.

5 Select **Next**.

6 From the Test Your Speakers screen, select the **Test** button. The system will test your speakers for sound.

Speaker Setup
MediaCenter
Test Your Speakers
Test your connection using the button. You should hear a test sound from each of your speakers.
Test
I heard sound from all of my speakers
I did not hear sound from all of my speakers
Back
Next
Cancel

Important: Then select **I heard sound from all my speakers**, even if you did not hear sound from all your speakers. The You Are Done! screen displays.

7 Select **Finish**.

8 Return to the Media Center Start menu and select **Settings > DVD > Audio**. **InterVideo** opens and displays the Welcome to Audio Settings screen.

9 Select Configuration. The Speaker Configuration screen displays.

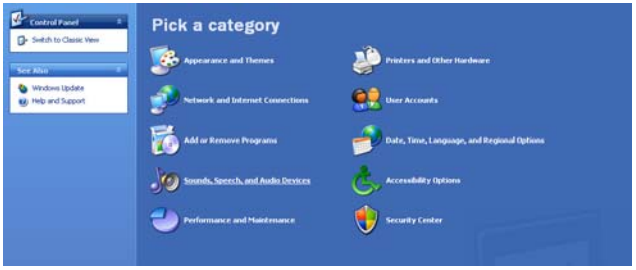
10 Verify that **Analog - 5.1 Channel** displays in the Set sound output to match your system text box. Select **Save** and close Media Center.

Note: Even if you are using a S/PDIF connection, **ALWAYS** choose **Analog - 5.1 Channel**. **DO NOT SELECT S/PDIF**.

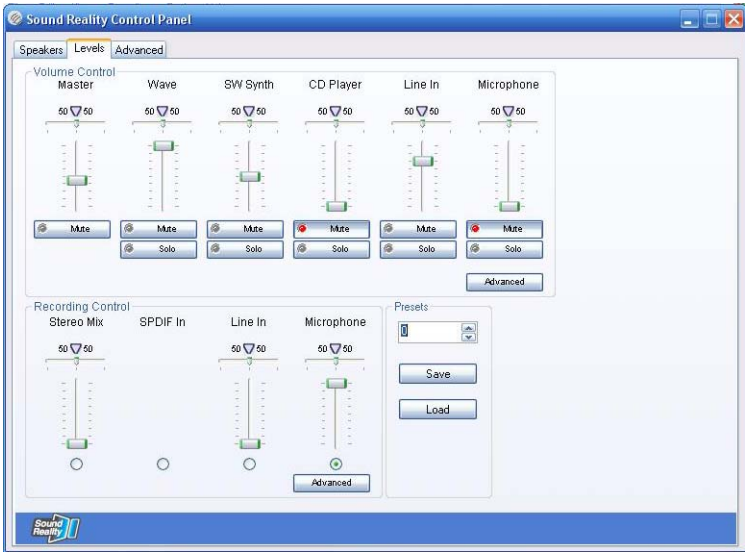
To complete Speaker Setup, go to the Windows Control Panel.

1 Open the Control Panel. Select Windows **Start > Control Panel**.

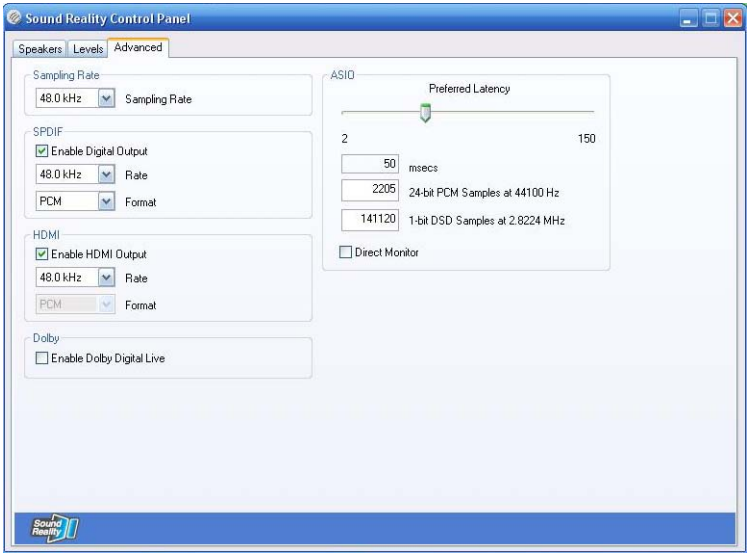
2 From the Category view, select Sounds, Speech, and Audio Devices.



3 From the Sounds, Speech, and Audio Devices screen, select **Sound Reality™ Audio** from the Pick a Control Panel icon section. The Sound Reality Control panel displays.



4 Select the **Advanced** tab.



5 From the S/PDIF group box:

- Check the **Enable Dolby® Digital Live** check box.

- Verify that **AC3** is the option selected for **Format**.
- Verify that **Enable Digital Output** is checked in the S/PDIF group box.

Note: If you are using a HDMI connection through a TV or an amplifier that supports 5.1 sound, do the following:

- check **Enable HDMI™ Output**
- select **AC3** for the format
- check **Enable Digital Output**

6 Close the Sound Reality Control Panel and the Windows Control Panel.

Your 5.1 Surround Sound Speaker Setup is complete.

Speaker Setup Notes

- After the 5.1 channel sound is setup, sound may not be outputted through the HDMI connection if your HDMI device does not support 5.1 channel sound. To enable HDMI sound, uncheck the **Enable Dolby Digital Live** check box and check/select the **Enable HDMI Output** check box located on the Sound Reality Control Panel, Advanced tab. This will disable the 5.1 channel sound output.
- Dolby Digital 5.1 must be selected for the audio output of the DVD from the DVD menu. **Note**: The VGX-XL2A does not support DTS sound decoding.

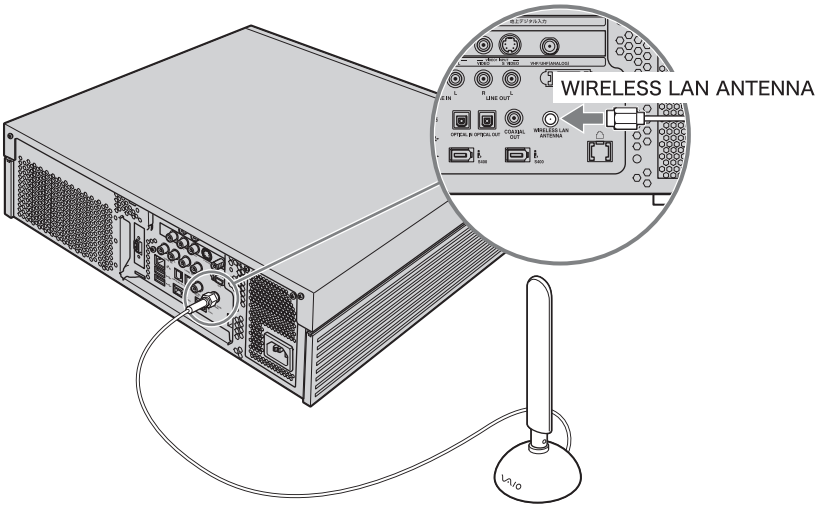
Step 4: Connecting to the Internet

Wired Network

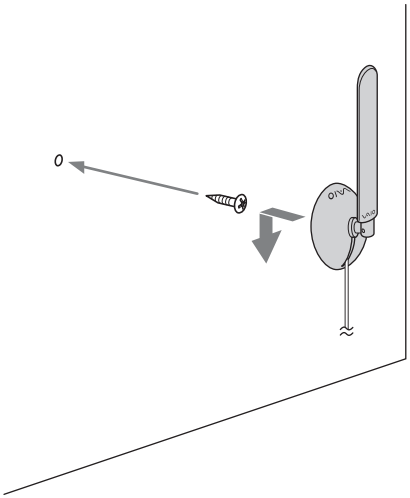
Use an RJ-45 connector cable. Connect one end to the Ethernet connector on the computer and the other end to your cable or DSL modem.

Wireless Network

Connect the WLAN antenna (included) to the connector on the back panel of the XL2A computer.



For better reception, if needed, you may mount the wireless LAN antenna to a wall using the included screws.



Launch the Marvell® Client Utility Application. Click the Windows **Start** button. Then select **All Programs > Marvell® Wireless SoftAP.** Select **Station** as the operation mode. Then proceed to Windows Wireless Zero Configuration service to set up your connection with your preferred Access Point. For additional information about setting up a wireless LAN, go to Appendix A.

Step 5: Turning Power On

Make sure all hardware is connected and that power cables are plugged into properly grounded electrical outlets (three pronged outlets).

Turn on the power to the computer, TV, and speakers.

Activate Wireless Keyboard Communication

1. From the front of the keyboard, slide the **Power** button to **On**.
2. From the back of the keyboard, slide the **Pointing Device** button to **On**.
3. From the back of the keyboard, and the front panel of the XL2A computer, **press the Connect buttons simultaneously** and hold for a few seconds.
4. Test the keyboard to make sure it is functioning properly.

Step 6: Software Setup

Microsoft Windows operating system setup

The first time you start your computer your will be presented with a series of screens for Microsoft® Windows® XP Setup. Please follow the on-screen instructions.

Note: For information concerning Firewall, Automatic Updates, Virus Protection, and other security related features of Microsoft Windows XP, see the Windows Help file.

Sony Registration

After you complete Microsoft Windows operating system setup, a Sony Registration screen automatically appears. Please complete all requested information to register your Sony® product.

Note: Registration can be done through the Internet. To register your product, go to http://www.esupport.sony.com and select Register from the menu bar.

Sony product registration is voluntary; failure to register will not diminish your limited warranty rights.

Sony encourages you to complete the "VAIO customer registration" in order for us to notify you with necessary information such as security information and provide full service/support to the customer who owns the VAIO® product.

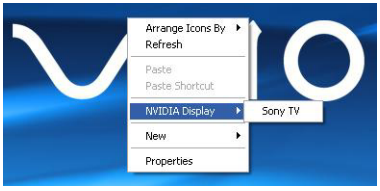
Software Setup Notes

- If Media Center automatically opens, and you need to adjust your picture quality, minimize Media Center and go to Step 7: Resolution Setup. When complete return to Media Center.
- Make sure your Internet connection is working properly.
- **Media Center Setup**: The first time Media Center starts, you will be presented with a series of screens that will guide you through Media Center Setup. Please follow all on-screen instructions.
- Media Center Wireless Network: If you have an existing wireless network, and you wish to add the XL2A computer to the network, start Media Center and from Settings, go to General > Media Center Setup > Join Wireless Network. Then follow all on-screen instructions.

Step 7: Resolution Setup

To set the resolution for your TV or monitor, do the following:

1. Using the pointing device on your wireless keyboard, right click anywhere on the Windows desktop.
2. From the menu, point to or click **NVIDIA® Display**. A new menu option opens. The menu option name depends on what TV or monitor is connected to the computer.



3 Click the appropriate display. The following screen displays.

4 From the Directory list, click **nView Display Settings**, if necessary.

5 Click the **Device Settings** button.

6 From the side menu, click **TV Format** and select the appropriate option for your TV from the list.

7 Continue with **Media Center Setup**.

Setting Up a Local Area Network

For detailed information on setting up your Wireless LAN[1], see Appendix A, “Setting up a Wireless LAN.”

Wired Network

Use an RJ-45 connector cable. Connect one end to the Ethernet connector on the DLS computer and the other end to your cable or DSL modem.

1. Requires compatible wireless access point(s). Some features may rely on Internet services which may require a fee."

Wireless Network

Wireless LAN removes all of the trouble of cable connections and helps to build a wireless LAN (Local Area Network) environment. This device is equipped with a 2.4 GHz wireless LAN Controller (IEEE802.11b/g compliant).

Turning the Power Off

Please follow the following procedure when turning the power off to the XL2A computer.

1. Select the Windows **Start** button.
2. Select **Turn Off Computer** and then from the Turn Off Computer screen, select **Turn Off**.

   In a short time the power to the XL2A computer goes off automatically and the power lamp goes off.

Note: If the power does not turn off by this procedure, you can turn the power off by holding down the Power button on the XL2A computer for more than six (6) seconds. **WARNING**: Any changes that have not been saved will be lost.

Power Saving Functions

The VGX-XL2A personal computer offers two power-saving function modes, Standby and Hibernation, which are used to reduce power consumption when not in use.

The table below list the characteristics of each function:

Standby Mode	
Power Lamp	Orange in color.
State	Reduces power consumption because it turns off the components other than the minimum components necessary while maintaining the current working status.
Enter Standby Mode	• Press the **Power/Standby** key on the keyboard. • Click **Standby** in the Turn Off Computer screen, which displays when selecting **Start > Turn Off Computer**. • Press the **Standby** button on the remote control.
Return to normal operation	• Either press the **Space** key or the **Power/Standby** key on the keyboard, or press the power button on the front of this device. • Press the **Standby** button on the remote control.

Hibernation State	
Power Lamp	Power lamp is off.
State	Main power is turned off and the fan for the internal main power section is paused. Saves the current working status to the hard disk and turns off the power for this device.
Enter Standby Mode	• Press the power button on the front of this device. • Click **Hibernate** in the Turn Off Computer screen, which displays when selecting **Start > Turn Off Computer**.
Return to normal operation	• Press the **Power** button on the front of this device. • Press the **Power/Standby** key on the keyboard. **Note**: This device will not return to normal operation by remote control when in hibernation.

Summary

Chapter 2: Setting Up Your VGX-XL2A Digital Living System™ provided you with step by step instruction about setting up the DLS system including the operating software.

Chapter 3:

Hardware Upgrades & Maintenance

Adding Memory

Memory can be upgraded using the expansion memory slot inside this device. Upgrading memory increases the data processing speed and allows faster response time when running multiple programs at the same time.

There are a total of 4 slots available in this device to install memory modules and it can be upgraded to a total of 2 GB. Upgrade the memory by installing memory modules sold separately.

Safety Information

Please read the following safety information before installing a memory modules.

- Please be careful not to get cut by the parts or the circuit board inside this device when installing the memory.
- Be careful not to catch your fingers on the cables inside this device and remove or dislodge the cable when installing the memory.
- Turning the power on with a foreign object (metal, such as a screw) left inside the device at the time of upgrading the memory may cause damage. Always remove any foreign objects and replace the cover before turning the power on.
- Don't touch the electronic components on the circuit board of this device. They are susceptible to pressure and static, which may cause a failure.
- Wait about one hour after turning off the power. The inside of this device may be hot right after the power is turned off and may cause burns.

Please be careful when upgrading memory. Mishandling when installing and removing can cause a failure of this device. You are encouraged to request the installation be done by a dealer or professional.

If you upgrade the memory by yourself and forget to close the inside connector, insert the memory backward, or not completely seat the memory, a failure or damage may result. Repair costs in these and similar situations will be charged to the owner.

Contact customer support for questions about upgrading the memory. The Sony repair centers provide a service for charge for those who can't install the memory by themselves and for people who purchased or plan to purchase Sony memory.

Sony Supported Memory Types

The following Sony memory modules can be installed in this device:

Capacity	Speed	Memory Module
512 MB	DDR2 533 (PC2-4200)	VGP-MM512J

Important Note: Always use DDR2 533 SDRAM DIMM VGP-MM512J.

Memory Capacity After an Upgrade.

Using Standard Memory: DDR2 533(PC2-4200)

	Standard	Upgrade
Capacity	Bank 0	Bank 1
Standard (1024MB)	512MB x 2 DDR2 533	

Removing Standard Memory and upgrading to 512MB x 4

	Standard	Upgrade
Capacity	Bank 0	Bank 1
2048MB	512MB x 2 DDR2 533	512MB x 2 DDR2 533

Note: Dual channel is a technology that doubles the memory bandwidth capability to transfer 128 bits using two 64-bit wide channels for the DDR memory interface. A total 128-bit wide dual channel DDR memory interface is achieved by loading identical pairs of two DDR memory modules with the same speed and the same capacity.

Precautions when selecting memory modules.

- There are various types of memory modules. Make sure that the products purchased at a store have a written warranty for the device when installing.
- Sony does not provide support for memory modules purchased at stores. Consult with the dealer where you purchased the memory module with questions.

Install Notes:

Observe the following when installing a memory module in order to not damage the memory module with static.

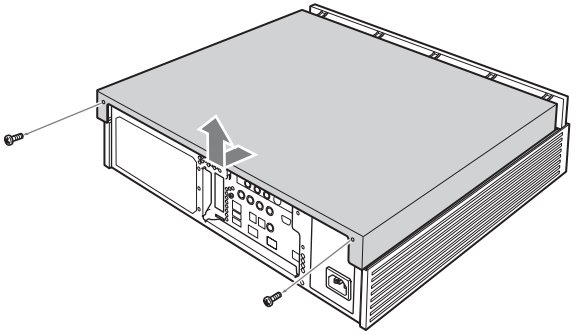
- Do not work in a location where static builds up (such as on the carpet) when upgrading the memory.
- Touch the metal in this device to discharge the static in your body first and then proceed with the work.
- The memory module comes in a static protection bag. Do not take the memory module out from the bag until right before installing.
- Do not touch the semiconductor chip or the connectors when you hold the memory module.
- Cover the memory module with a static protection bag or aluminum foil to store.

Please be careful of the following when upgrading the memory as the memory slots for this device are separated into two banks.

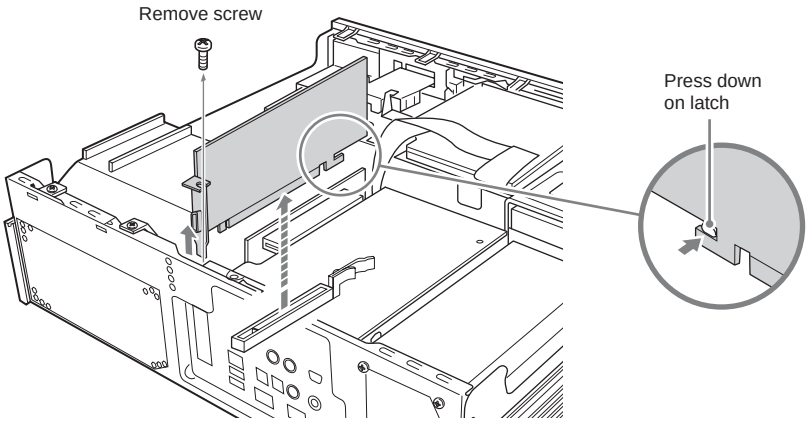
- There are two banks and four slots (two in each bank) available to install memory modules in this device. Each slot can hold a 512 MB memory module.
- Install memory modules of the same type, name, speed, and capacity in both slots in the same bank.
- Always install from bank 0 when installing memory modules.
- Also, refer to the memory module user's manual when installing.
- The memory modules have a proper direction.
- Properly match the notch area on the edge of the memory module connector and the projections (inside the connector) in the slot.
- Please be careful not to forcefully insert the memory module in the slot in the opposite direction which can cause damage to the memory module and the slot or loosen it from the circuit board.

Install and remove memory modules

1. Turn off the power to this device and all peripheral devices, and remove the power cord and all cables connecting peripheral devices. Some inside components may be hot. Wait approximately one hour before proceeding to work.
2. Remove the upper cover. Remove the screws at the rear and slide the cover off.



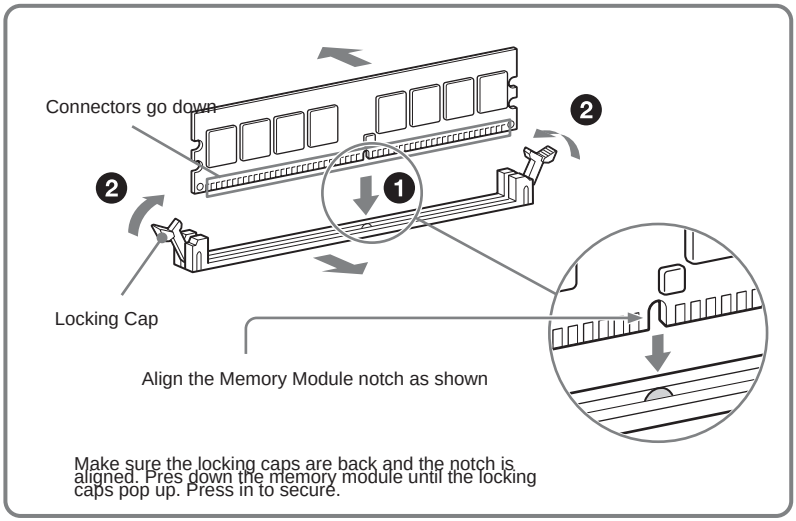
3 Remove the graphic card. Remove the cable and screw first and remove the graphic card while pressing the latch.

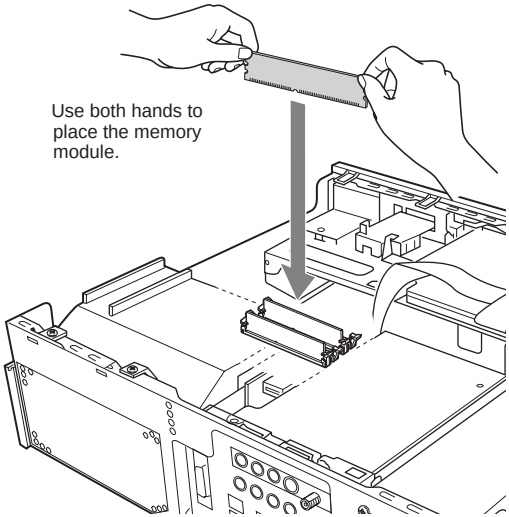


4 Touch metal to discharge any static buildup in your body and then remove the memory module from of the package.

5 Carefully install the memory module. (Please refer to the Install Notes listed above.) If you have any problems please contact your Sony Technical Support Representative. See VAIO Support Central.

- Match the memory module to the slot by paying attention to the direction of the notch as shown in the illustration below.
- Insert the memory module in the slot vertically until the clips come up and secure it.
- Install two memory modules as one set. There is no guarantee that it will work if only one memory module is installed. Also, use two memory modules of the same model name and same capacity and install them in the same bank.
- Please be careful not to catch your finger on the cables inside this device and remove the cable when installing the memory.
- The harness connector may be raised when installing the memory. Check by pressing the harness connector to make sure there is no gap.
- Please be careful not to get cut on the parts or the circuit board inside this device when installing the memory.

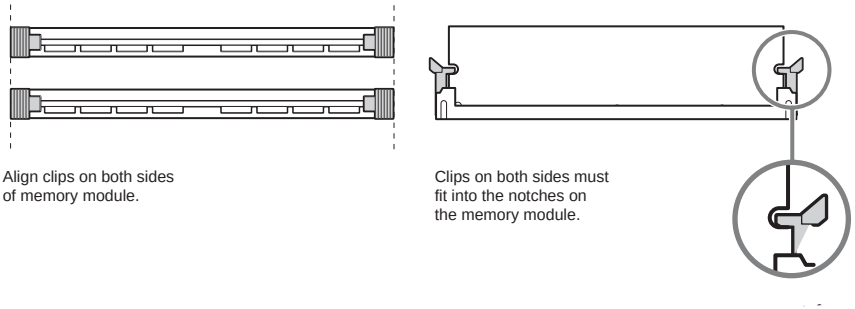

Connectors go down
2
2
1
Locking Cap
Align the Memory Module notch as shown
Make sure the locking caps are back and the notch is aligned. Pres down the memory module until the locking caps pop up. Press in to secure.



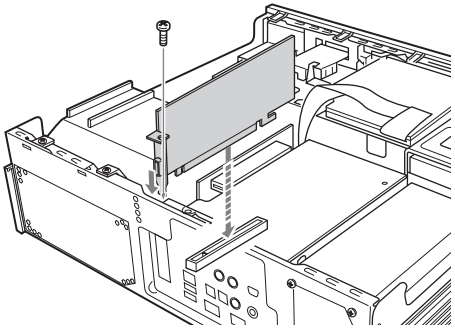
6 Make sure that the memory module is installed properly.

Check the following after installing the memory module:

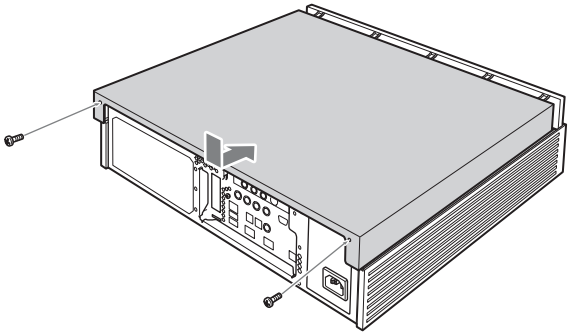
- The clips on both sides are aligned with each other.
- The clips on both sides fit into the notches of the memory module properly.



7 Install the graphics card. Install the graphics card, connect the cable and tighten the screw.

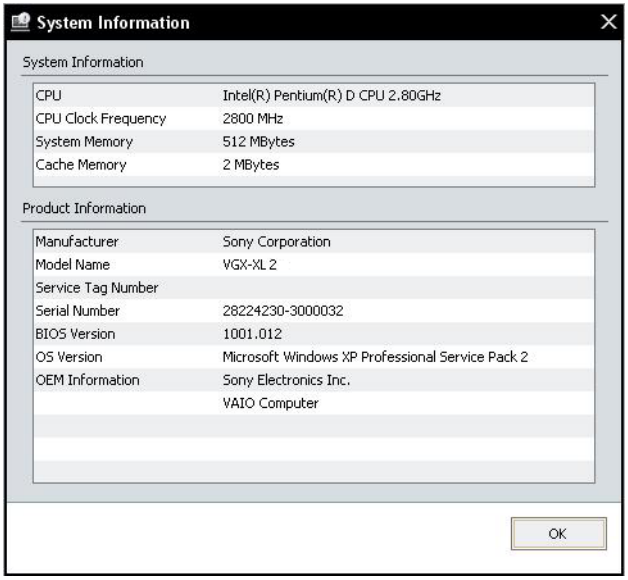


8 Install the upper cover. Install the cover and tighten the screws on the back.



9 Connect the power cord and the peripheral devices that were removed in Step 1 and turn on the power to this device.

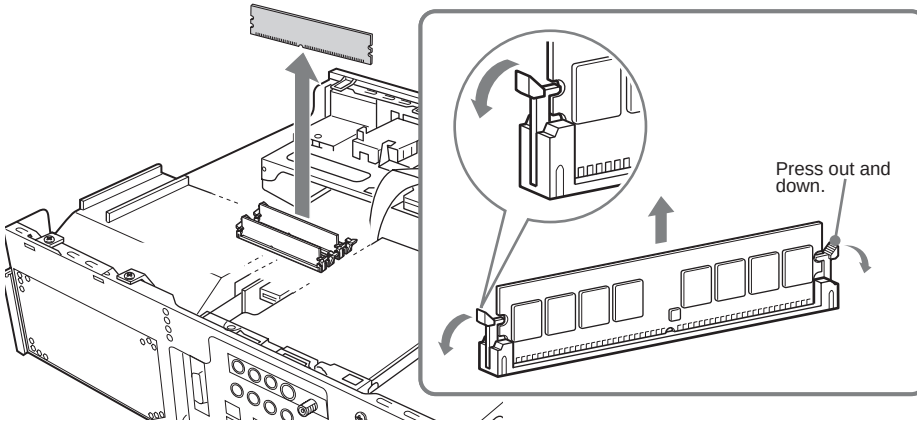
10 Click the **Start** button and then point to **All Programs, VAIO® System Information** and then click **VAIO® System Information**.



Make sure that **System Memory** displays the correct memory capacity. If the memory capacity is correct, memory installation is complete. If the memory capacity has not increased, remove the memory module after turning off the power to this device, and repeat the procedure to properly install the memory module again.

Remove Memory Module

Discharge static in your body by touching the metal inside this device, and then press out and down on the clips on both of the memory slots. Carefully lift the memory module out of the slot.



Add a Hard Disk

The XL2A computer contains 2x160GB in a RAID 0 configuration. A total of 3 serial ATA hard disks (the 2 pre-installed hard disks plus one additional) can be installed in the hard disk drive bay inside this device. Please read the following information before adding an additional hard disk.

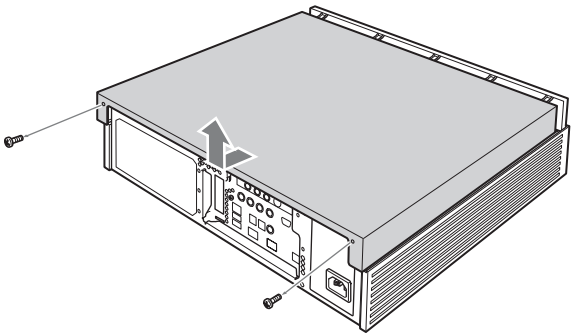
- All of the repair cost may be charged if a failure or accident happens when installing the hard disk by yourself.
- Be careful when upgrading hard disks. Mishandling when installing and removing can cause a failure or damage to this device.
- Contact your VAIO® Technical Support Representative for questions regarding upgrading the hard disk.
- Be careful not to catch a finger on a cable inside this device and accidently loosen or remove the cable when installing the hard disk.
- Please be careful not to get cut by the parts or the circuit board inside this device when installing the hard disk.
- Turning the power on with a foreign object (metal, such as a screw) left inside the device at the time of upgrading the hard disk may cause damage. Always remove any foreign objects and replace the cover before turning the power on.
- Don't touch the electronic components on the circuit board of this device. They are susceptible to pressure and static, which may cause a failure.
- The size (width) of the drive bay is 3.5 inches.
- This device may not operate depending on the hard disk used to upgrade. Contact the manufacturer of the device for more detailed information when upgrading.
- There may be a limit on downloading video from i.LINK®[1] support devices depending on the hard disk used to upgrade.

1. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connection for information on compatibility, operating conditions and proper connection. For information on any Sony device having an i.LINK connection, contact Sony at 1-800-686-7669.

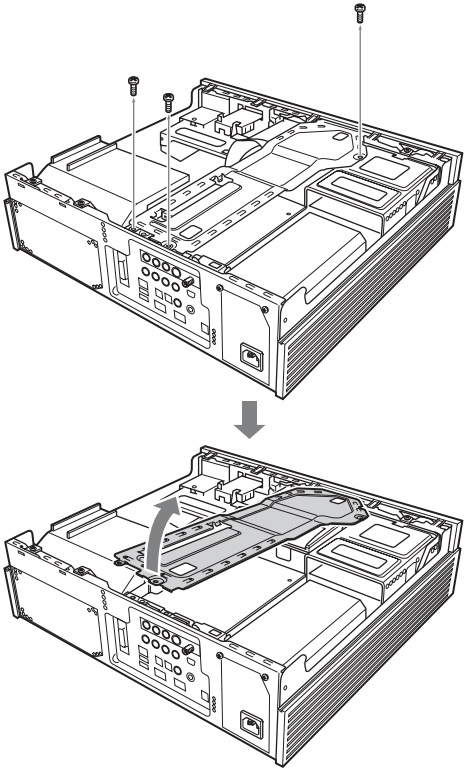
- Always install or remove a hard disk after pulling the power cord of this computer or the peripheral device from the power outlet. Installing or removing the hard disk with the power cord still plugged in may cause damage to the hard disk, this computer, or a peripheral device.
- The inside of this device may be hot right after the power is turned off and may cause burns. Please wait to work until the device has cooled off.
- The drive number for the upgraded hard disk may vary depending on the environment you use ("Local disk (E:)" or "Local disk (F:)" may be displayed). Also, please note that the drive number for the upgraded hard disk may change when recovering this device.
- Recorded video is saved to the C: drive, by default.

To Add / Upgrade a Hard Disk

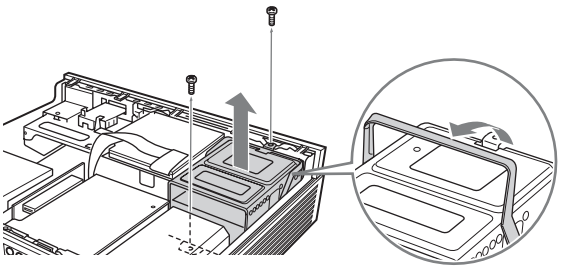
1. Turn off the power to this device and all peripheral devices, and remove the power cord and all cables connecting peripheral devices. Some inside components may be hot. Wait approximately one hour before proceeding to work.
2. Remove the upper cover. Remove the screws in the rear and slide the cover off.



3 Remove the inside panel. Remove the screws from the inside panel and remove the panel.

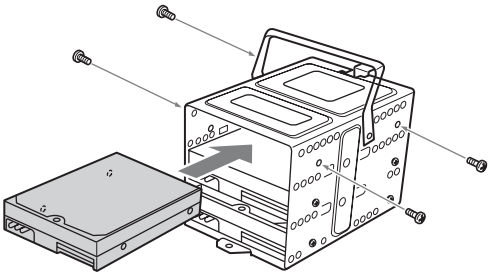


4 Remove the hard disk bay. Remove the cables connected to the hard disk installed at the time of purchase and remove the hard disk drive bay.



Note: Touching other parts can cause a failure when installing the hard disk drive bay. Be careful not to drop the screws inside this device when unscrewing.

5 Install the hard disk upgrade in the hard disk drive bay. Secure the hard disk upgrade in the hard disk drive bay with the screws. Install in the lower bay when there is an open space in the lower bay.

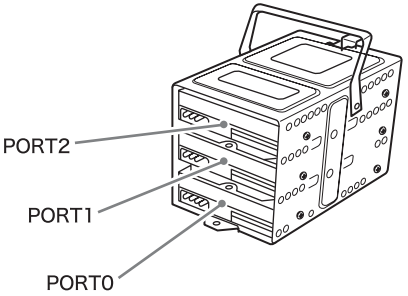


6 Connect the cables to both of the hard disks, the one installed at the time of purchasing and the upgraded hard disk.

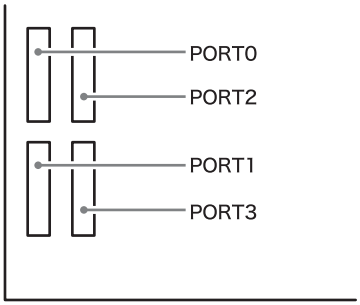
Always install the serial ATA power cable and the serial ATA cable. In the meantime, connect the serial ATA cable between the PORT (Serial ATA) connector on the circuit board inside this device and the hard disk according to the following list:

Main Unit Expansion Connector Designation	Hard Disk to Connect
PORT 0 (Port 0)	Hard disk in the lower drive bay
PORT 1 (Port 1)	Hard disk in the middle drive bay
PORT 2 (Port 2)	Hard disk in the upper drive bay

Below is the install location of the hard disk and the corresponding PORT (Serial ATA) connector

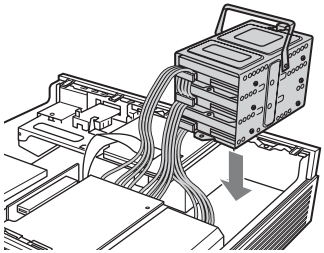


Below is the location of the main unit expansion connector.



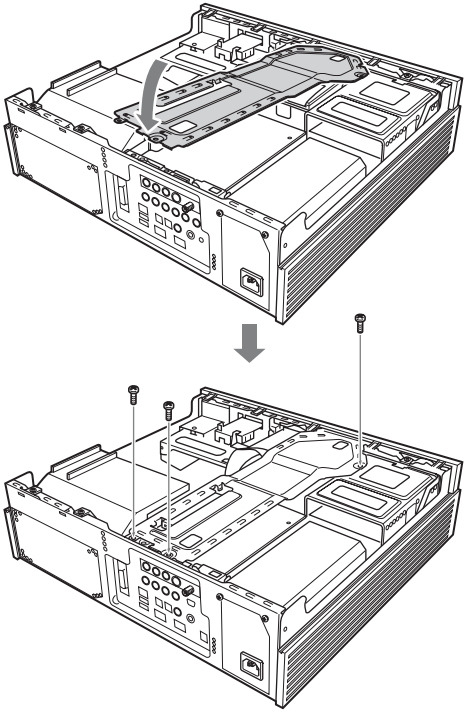
Cables may be pulled out to open/close the cover if serial ATA cables with a straight connectors are used. However, the use of serial ATA cables with a L shaped connector areas is recommended.

7 Install the hard disk drive bay in the original location.

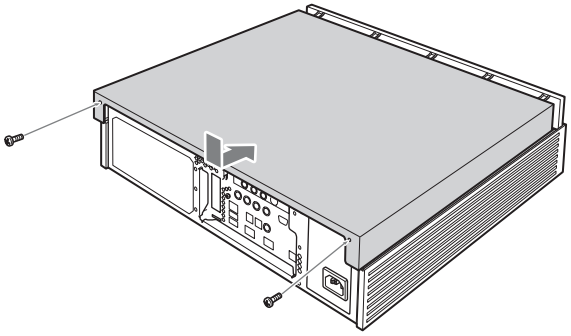


Note: Touching other parts when installing the hard disk drive bay can cause damage.

8 Install the inside panel. Insert the inside panel and tighten the screws.



9 Install the upper cover. Install the cover and tighten the screws on the back.



10 Connect the power cord and the peripheral devices that were removed in Step 1 and turn on the power to this device.

Remove a Hard Disk

Remove a hard disk by doing the reverse of the installation procedures. Turn off the power to this device and any peripheral devices and remove the power cord and all cables connecting to peripheral devices before removing the hard disk.

Using the upgraded hard disk

Login with administrator privileges and follow the procedures below for "Creating the partition", "Setting the partition type", and "Formatting the partition". The upgraded hard disk is created as an extended partition and this device may not operate properly without NTFS formatting.

1. Turn the power on and log in with Administrator privileges.
2. Click Windows **Start**, then **Control Panel**.
3. From the Category View, click **Performance and Maintenance** and then click the Control Panel icon A**dministrative Tools**.
4. Double-click the **Computer Management** shortcut icon to display the Computer Management properties box.
5. Click **Disk Management** located in the Computer Management directory tree.

   The status of partitions displays in the right side of the window. A new hard disk or a hard disk that has not been used will display a Status of **Not Assigned**.
6. Right click on the upgraded hard disk, **Disk "x"** (where x equals 1 or 2) and select **Initialize Disk**.
7. Make sure the disk selected in Step 6 is checked and click **OK**.

   Note: The above procedure may not be necessary depending on the hard disk to be upgraded.
8. Right click on the **Not Assigned** area and click **New Partition**. The **New Partition Wizard** screen displays.
9. Click **Next**. The **Select Partition Type** screen displays.
10. Select **Extended Partition** and click **Next**. The **Specify Partition Size** screen is displays.

    Note: Always select **Extended Partition** when creating a partition. Failure in the software operation happens if the **Primary Partition** is selected.

11 Enter the size of the partition you want to create in the **Partition Size** field and click **Next**. The Partition Creation **Completion** screen is displays.

12 Click **Complete**. The Partition Creation **Completion** screen closes and the hard disk display now shows the partition has changed from **Not Assigned** to **Open Space**.

13 Right click on the Open Space area and click **Create New Logical Drive**. The **Create New Partition** screen displays.

14 Click **Next**. The **Select Partition Type** screen is displays.

15 Select the **Logic Drive** and click **Next**. The Specify Partition Size screen is displays.

16 Enter the size of the partition you want to create in the **Partition Size** field and click **Next**. The **Assign Drive Letter or Path** screen is displays.

17 Select **Assign a Drive Letter** and click **Next**. The **Partition Format** screen displays.

18 Set the options in **Format** as follows:

- File system to use: **NTFS**
- Allocation size: **Default**
- Volume label: **Volume**

19 When complete, click **Next**. The New Partition **Completion** screen is displays.

Click **Complete**.

Notes

Formatting of the hard disk to set up the partition begins. The status of the partition is displays in the right side of the window. When the formatting is complete, the upgraded hard disk is ready to use.

RAID configuration can be changed after upgrading the hard disk.
Refer to "Recovery After Changing the RAID Configuration" for details.

Click on the [Start] button and move your pointer to [All Programs], click on [VAIO Setting], set "Never" for "Turn Off The Power For Hard Disk" in the "Power Option Property" screen displayed by double clicking [Power/Battery] [Power Option] in this order.
If it is set to other than "Never", recording using the Do VAIO may fail.

When a RAID volume and a drive not configured as a RAID (volume) are mixed in the system, Windows may not run. Refer to "Windows doesn't start" in "Troubleshooting" regarding this case.

When you encounter a problem

VAIO® Support Central

VAIO® Support Central provides you with a single location for all of your support needs and allows you to easily access valuable support and technical information from Sony and Microsoft. Keep your VAIO® computer's software and operating system updated using VAIO Web Support and Microsoft Update.

Note: You must be connected to the Internet to access some of the VAIO Support Central features.

Appendix Information

There are five appendices in the back of this guide to provide you with additional information.

- Appendix A: Wireless LAN
- Appendix B: VAIO Media Software
- Appendix C: Setting Up Digital TV
- Appendix D: Hard Disk Drive Recovery
- Appendix E: RAID Configuration
- Appendix F: Troubleshooting
- Appendix G: Program Support

Summary

Chapter 3: Hardware Upgrades & Maintenance provided you with detailed information on upgrading and maintaining your VGX-XL2A Digital Living System™.

Appendix A:
Wireless Local Area Network

Overview

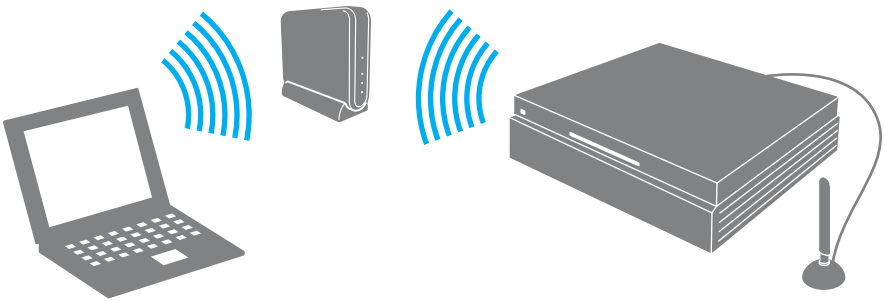
The Wireless LAN removes all of the trouble of cable connections and helps to build a wireless LAN (Local Area Network) environment.

This device is equipped with a 2.4 GHz wireless LAN[1] controller (IEEE802.11b/g compliant). IEEE802.11g is capable of higher speed communication than IEEE802.11b.

Note: 5 GHz wireless LAN (IEEE802.11a) technology and 2.4 GHz wireless LAN (IEEE802.11b/g technology do not work together due to different frequencies.

There are two types of wireless LAN connection topologies:

- **Infrastructure mode** which has a network structure based on a wireless LAN access point. The XL2A computer can also act as an access point for a LAN setup.

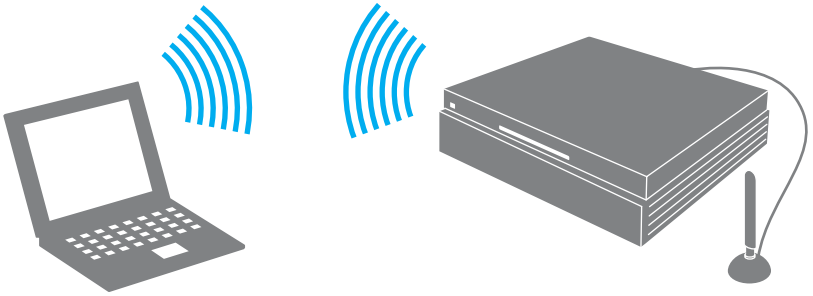


1. Requires compatible wireless access point(s). Some features may rely on Internet services which may require a fee.

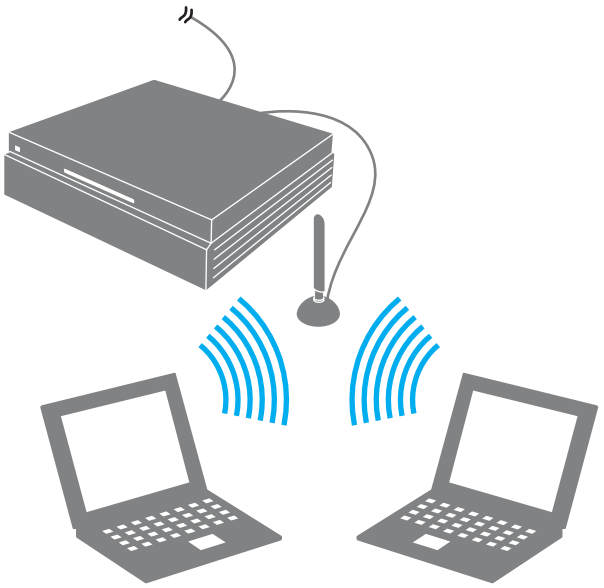
When Infrastructure mode is used, you can enjoy the Internet and E-mail communications where ever a wireless access point is set up. Also, a broadband network is possible if you communicate with an access point connected to ADSL modem, etc. Furthermore, this device itself can be used as an access point.

Note: You may need to enter into a contract with a wireless LAN service provider to use wireless LAN communications when you are away.

- **Ad hoc mode** which connects computers directly without an access point.



Use the VGX-XL2A as an Access Point



- You may need to enter into a contract with a wireless LAN connections service provider to use wireless LAN communications when your are away.

Communicate Using Infrastructure Mode

Wireless LAN Access Point

Note: Before setting up your wireless LAN access point, make sure you have connected the Wireless LAN Antenna to the Wireless LAN Antenna connector located on the back panel of the XL2A computer.

This device and a wireless LAN access point (sold separately) can be connected using the following procedure. For details, please refer to Windows Help.

Further access point settings are required to connect to the Internet or a LAN, etc. at work via an access point. For details, please refer to the manual included with the access point you use.

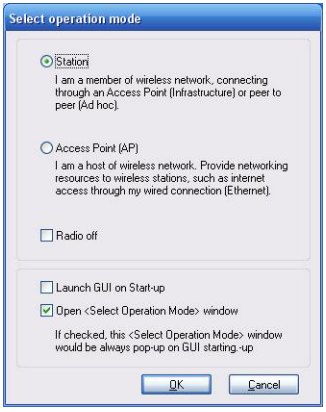
To connect to an access point:

1 Select Turn Radio On by right clicking the red icon in the taskbar notification area on the lower right desktop screen. The wireless LAN is turned on and the WLAN (wireless LAN) lamp turns green.

or

When the icon is not displayed in the taskbar notification area, click the Windows **Start** button. Then select **All Programs > Marvell® Wireless SoftAP > Marvell® Wireless Soft_g_SoftAP Configuration Utility**.

- Select Station Mode and make sure that Radio Off check box is unchecked from the Operation Mode screen. Then proceed to Step 4.

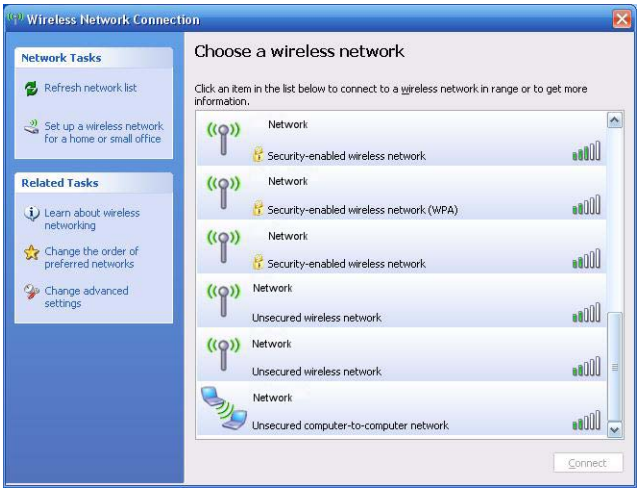


2 Right click in the taskbar notification area on the lower right desktop screen and select **Select Mode**.

3 From the Select Operations Mode screen, select **Station.** Make sure the Radio Off check box is unchecked and click **OK**. (See above image)

4 Click Wireless Network in the taskbar notification area at the lower right of the screen on the desktop or the Wireless Network icon.

5 From the Wireless network connection screen, select the wireless LAN access point to connect to from the **Choose a wireless network** list and click **Connect**.



Note: If you can't find the wireless LAN access point to connect to in the **Choose a wireless network list**, click on **Refresh network list** in Network tasks.

6 The screen to enter the Network Key displays.

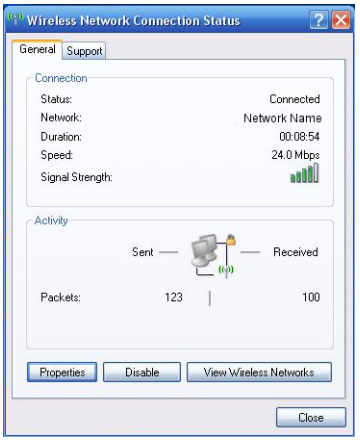
Wireless Network Connection
The network 'LocationFreeTest2' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

7 Input the "Network key" as needed, and click **Connect**. For information about the network key, please refer to "About Network Keys".

"**Connected**" displays on the line of the selected wireless LAN access point when it is connected.

To confirm the connection status of the wireless LAN access point

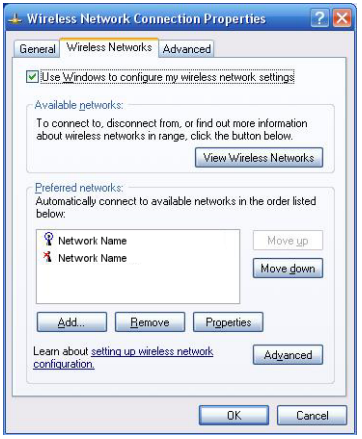
- Click the Wireless Network On or the Wireless Network Off icon in the taskbar notification area. The Wireless Network Connection Status screen displays and you can confirm the connection status for the wireless LAN access point.



Once you input the Network Key and connect, the wireless LAN access point is registered and you can connect without entering the Network Key again.

To confirm the individual information for the wireless LAN access point

1. Click Windows the Windows **Start** menu and then click **Control Panel**.
2. From the Control Panel, click the **Network Connections** icon.
3. From the wireless network device listed, right-click the device and select **Properties**. The Wireless Network Connections Properties screen displays.



4 Click the **Wireless Networks** tab. The list of **Preferred Networks** displays.

5 From the Preferred Networks list, select the network device you want to confirm and then click **Properties**. The properties screen is displays. Confirm the detailed information about the wireless LAN access point is correct.

To create a new connection or switch connections

You can create new location to connect to or switch connections to another wireless LAN access point with wireless LAN while connected. For additional information, please refer to Windows **Help**

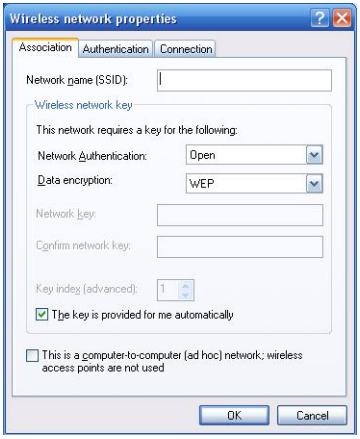
1 Click the Windows **Start** button and then click **Control Panel**.

2 From the Control Panel, click the **Network Connections** icon. The Network Connections screen displays.

3 Right click the **Wireless Network Connections** icon and then click **Properties**. The Wireless Network Connection Properties screen displays.

4 Click the **Wireless Networks** tab. The list of **Preferred Networks** displays.

5 Click **Add** in the Preferred Networks. The Wireless Network Properties screen displays.



Adjust the following access point settings to be used:

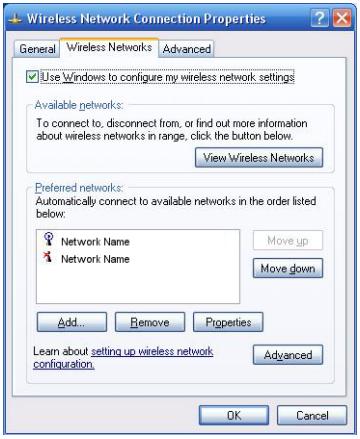
- Enter Network name (SSID). You can enter a maximum of 32 characters (case-sensitive) for the Network name (SSID).
- Set **Network Authentication** and **Data Encryption**.
- If **WPA-PSK** and **WEP** are selected, remove the check mark by clicking **Key is Provided Automatically** and, if necessary, enter the **Network key**.

6 Click **OK**. If you successfully connect to the new wireless LAN access point, a message displays in the communication area saying you are connected.

To set the priority of the wireless LAN access points that are available for connection

Note: If you move outside of the range for connecting to a wireless LAN access point, it automatically switches to the next registered access point in order of priority, choosing from available access points.

1. Click **Start** from the Windows task bar, and then click **Control Panel**.
2. From the Control Panel, click the **Network Connections** icon.
3. From anywhere on the Network Connections screen, right-click and select **Properties**. The Wireless Network Connections Properties screen displays.



4. Click the **Wireless Network Connections** icon and click **Properties**.
5. From the Wireless Network Connections Properties screen, click the **Wireless Networks** tab. The list of **Preferred Networks** displays.
6. Select the one you want to change from the **Priority Network** list and click **Move up** or **Move down**.
7. Click **OK**.

Communicate Using Ad Hoc Mode

Wireless Ad Hoc Connection

If Ad Hoc mode is used (connecting directly to another computer), the wireless LAN devices can directly connect to each other without a wireless LAN access point. Set the first computer to Ad hoc mode and then connect the other computers to the first computer.

To create an Ad Hoc network

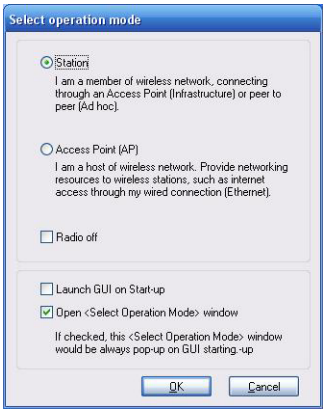
1 Select **Turn Radio On** by right-clicking the red icon in the taskbar notification area on the lower right desktop screen.

The wireless LAN turns on and the WLAN (wireless LAN) lamp turns green.

Or, If the icon is not displayed in the communication area, click Windows **Start**, point to **All Programs > Marvell® Wireless SoftAP** and then click **Marvell® Wireless Soft_g_SoftAP Configuration Utility**.

- From the Operation Mode screen, select **Station Mode** and make sure the Radio Off check box is unchecked. Proceed to Step 4.

2 Select **Select Mode** by right clicking the red icon in the taskbar notification area on the lower right desktop screen. The Select Operation Mode screen displays.



3 Select **Station** in the Select Operation Mode screen and click **OK**.

4 Click Windows **Start** and then click **Control Panel**. The Control Panel screen displays.

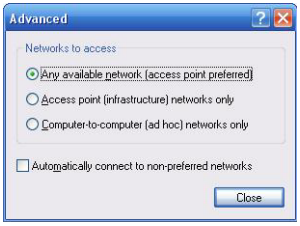
5 Click the **Network and Internet Connections** icon.

6 Click the **Network Connections** icon. The Network Connections screen displays.

7 Right click the **Wireless Network Connections** icon and click on **Properties**. The Wireless Network Connection Properties screen displays.

8 Click the **Wireless Networks** tab.

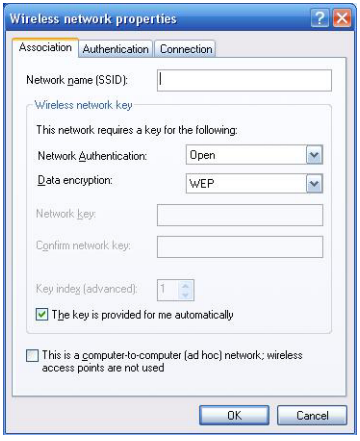
9 Click **Advanced**. The Advanced screen displays.



10 Select **Only computer-to-computer (ad hoc) networks** in Network to Access and click **Close**.

This allows you to connect only to Ad Hoc networks.

11 Click **Add**. The Wireless Network Properties screen displays.



12 Enter Network Name (**SSID**). You can enter a maximum of 32 characters (case-sensitive) for the Network name (SSID).

13 Click to remove the check on **The key is provided for me automatically**, as needed.

14 Enter the Network key and again to confirm the entry. Click **OK**.

Confirm that the **Network name (SSID)** entered in Step 12 is added to the top of the list of Preferred Networks.

15 Click **OK**.

Please follow your computer setting method to set up the second computer.

To Participate in a Current Ad Hoc Network

1 Select **Turn Radio On** by right clicking the red icon located in the taskbar notification area on the lower right desktop screen.

The Wireless LAN turns on and the WLAN (wireless LAN) lamp turns green.

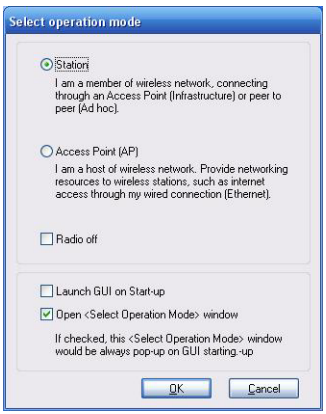
Or, If the icon is not displayed in the communication area, click Windows **Start**, point to **All Programs > Marvell® Wireless SoftAP** and then click **Marvell® Wireless Soft_g_SoftAP Configuration Utility**.

- From the Operation Mode screen, select Station Mode and make sure the Radio Off check box is unchecked. Proceed to Step 4.

2 Select **Select Mode** by right clicking the green icon in the taskbar notification area on the lower right desktop screen.

The Select Operation Mode screen displays.

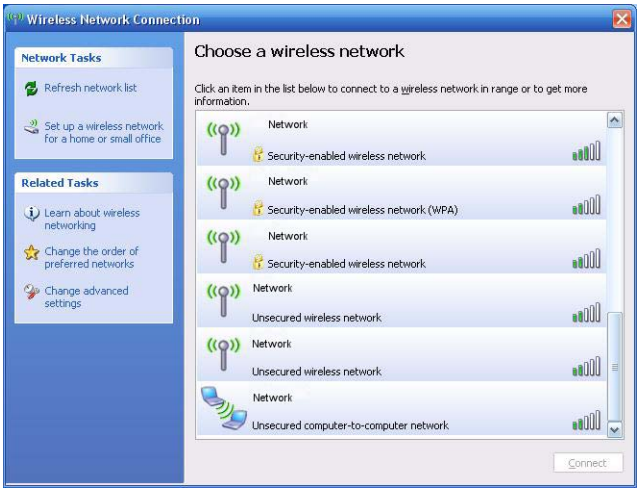
3 Select a **Station** in the Select Operation Mode screen and click **OK**.



4 Click the Wireless Network On icon in the taskbar notification area at the lower right of the screen on the desktop or the Wireless Network Off icon.

5 Connecting to the Ad Hoc Network.

- Select the Ad hoc network to connect to from the **Select a Wireless Network** list and click **Connect**. If you can't find the Ad Hoc Network to connect to in the **Select a Wireless Network** list, click **Refresh the Network List** in Network task.



The screen to input the network key displays.

Wireless Network Connection
The network 'LocationFreeTest2' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

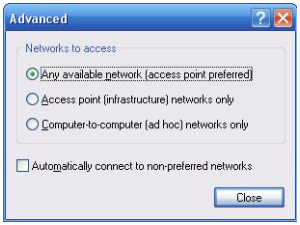
- Enter the Network Key (case-sensitive) as needed, and click **Connect**.
- Please follow your computer setting method to set up the second computer.

Note: The channel for Ad hoc mode is automatically set for this device. Users cannot change this setting.

To quit Ad Hoc mode

Quit the Ad Hoc Mode with the following procedure and return to Infrastructure Mode.

1. Click **Start** from the Windows taskbar, and then click **Control Panel**.
2. From the Control Panel, click the **Network Connections** icon.
3. From anywhere on the Network Connections screen, right-click and select **Properties**. The Wireless Network Connections Properties screen displays.
4. Click the **Wireless Network Connections** icon and click **Properties**.
5. From the Wireless Network Connections Properties screen, click the **Wireless Networks** tab. The list of **Preferred Networks** displays.
6. Click Advanced and select **Any Available Network (access point preferred)** in Network to Access and click **Close**.



7. Select the network selected in Ad Hoc Mode from the Preferred Network list and click **Delete**.
8. Click **OK**.

About network keys

This is a data key for encrypting the wireless LAN communication between IEEE802.11b/g devices. This is also called a Private Key, Encryption Key or WEP Key.

This enables the wireless LAN communication only between the wireless LAN access points and computers which use same key information.

The network key is pre-set in each access point (please confirm that the network key setting is changed after purchasing to prevent illegal usage). If you don't know the network key, please refer to the manual that came with the access point or check with the access point administrator.

Use this device to function as an access point

Set this device to function as an access point for other computers.

To use this device as an access point

1. Select **Turn Radio On** by right-clicking the red icon in the taskbar notification area on the lower right desktop screen.

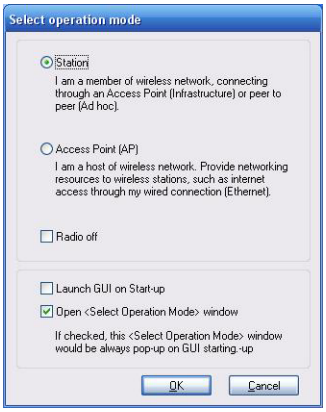
   The wireless LAN turns on and the WLAN (wireless LAN) lamp turns green.

   Or, If the icon is not displayed in the communication area, click Windows **Start**, point to **All Programs > Marvell® Wireless SoftAP** and then click **Marvell® Wireless Soft_g_SoftAP Configuration Utility**.

   - From the Operation Mode screen, select Station Mode and make sure the Radio Off check box is unchecked. Proceed to Step 4.

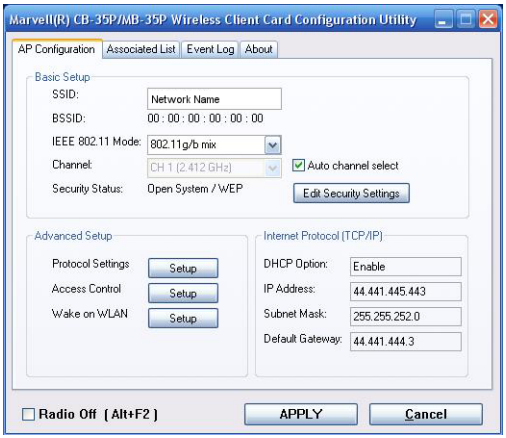
2. Select **Select Mode** by right-clicking the red icon in the taskbar notification area on the lower right desktop screen.

   The "Select Operation Mode" screen displays.

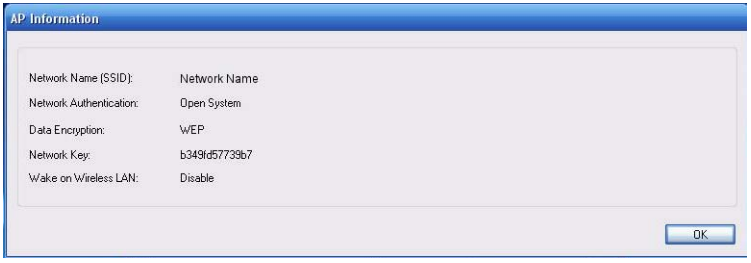


3. Select **Access Point (AP)** in the Select Operation Mode screen and click **OK**.

The Marvell® CB-35P/MB-35P Wireless Client Card Settings Utility screen displays.

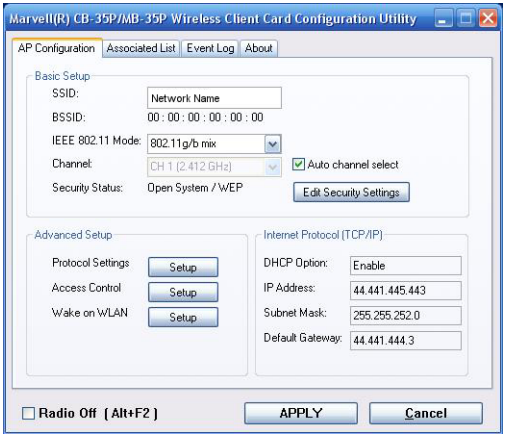


Note: When you set this as an access point for the first time or change the settings, the AP Information screen displays. The current access point settings are displayed in the AP Information screen.



Note: Do not continue displaying the settings because the network key is displayed in the AP Information screen.

4 Click **Cancel**.



You can now use this device as an access point.

Set a Network Bridge.

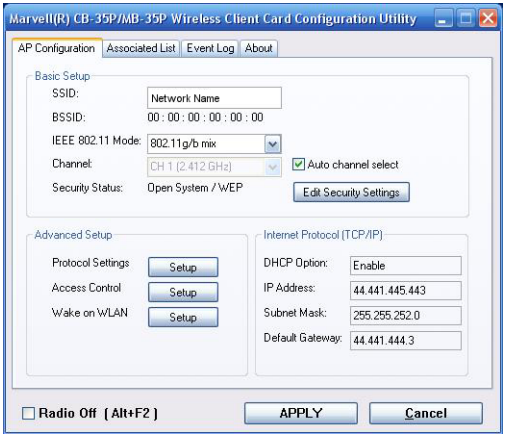
For details, refer to the "VAIO Electronic Manual". Click **How to use VAIO > Network (LAN) in "Internet/Network" > Use Network Bridge**.

Marvell® CB-35P/MB-35P Wireless Client Card Settings Utility screen

This allows you to change various settings to use this device as an access point.

AP Settings

The AP Settings screen displays below.



Basic Settings

Setting	Description
SSID	Enter an access point name to be displayed to the clients.
BSSID	This is a network identifier in the wireless LAN and has the same value as the MAC address.
IEEE 802.11 mode	**802.11b**: Only stations which support 802.11b are able to connect to this access point. **802.11g**: Only stations which support 802.11g are able to connect to this access point. **802.11g/b**: Only stations which support 802.11g/b are able to connect to this access point.
Channel	Selects the channel to use. Automatic Channel Selection: • If the check box is checked, the channel is automatically selected. • If the check box is not checked, the channel is manually selected.
Security Settings	The current access point security settings are displayed. Click **Edit Security Settings** to display the Security Settings screen.

Detailed Settings

Settings	Description
Protocol Settings	Detailed settings of the access point can be modified. Normally, you don't need to change these.
Access Control	Use this setting when you want to limit the clients that can connect to the access point.
Wake on WLAN	Use this setting when you want to use the Wake on Wireless LAN function.
Wireless Disabled	Switches the wireless LAN on/off.

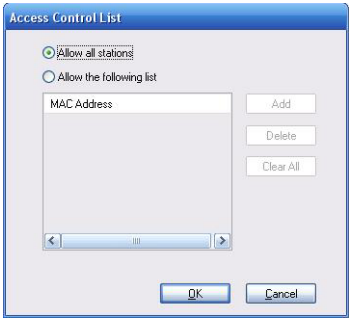
Security Settings screen

Set the security for the access point in the Security Settings screen.

Setting	Description
Invalid	Security settings can't be set.
WEP	The transmitted packets are encrypted using WEP. Select the authentication method in **Authentication**. **Open System**: This does not authenticate when connecting to the access point. However, the network key is required to decode the communication data. If the network key is wrong, you are able to connect to the access point, but unable to communicate. **Shared Key**: Authentication can be done using the network key when connecting to the access point. A network key is required for both authentication and encoding the communication data. If the network key is wrong, you are unable to connect to the access point (authentication failed). **Automatic Switch**: The client determines whether to use a shared key, and is able to connect to the access point. **WEP Key Settings**: Key 1 - key 4 are able to be set.
WPA-PSK	When the client is set to WPA, the access point can be connected.

Access control screen

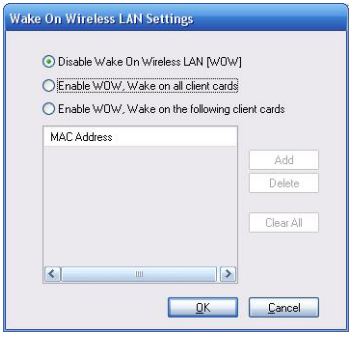
The Access control screen provides control over which computers are able to connect to the access point of this device.



Setting	Description
Allow all stations	Detailed settings of the access point can be modified. Normally, you don't need to change these.
Allow the list below	Use this setting when you want to limit the clients that can connect to the access point.

Wake on wireless LAN settings screen

The Wake on Wireless LAN Setting screen provides settings related to the Wake on Wireless LAN function. Wake on Wireless LAN is a function to run this device automatically from standby or hibernate when access is made to the access point if this device is functioning as an access point.



Setting	Description
Disable Wake On wireless LAN (WOW)	Disables the Wake On Wireless LAN function.
Enable WOW and allow Wake On for all clients	Enables this device to run access from any client.
Enable WOW and allow Wake On for the following clients	Enables this device to run only when accessed from a client added to the list.

Important Note: If the setting **Allow this device to bring the computer out of standby** in Power Management in the “Marvell® Libertas Wireless 802.11g/b Wireless (CB35) property" driver screen is not checked, the Wake on Wireless LAN does not function.

Close Wireless Communication

Select **Turn Radio Off** by right-clicking the green icon in the taskbar notification area on the lower right desktop screen.

The wireless LAN turns off and the WLAN (wireless LAN) lamp turns off.

Or, if the icon is not displayed in the communication area, click Windows **Start** point to **All Programs**, **Marvell® Wireless SoftAP**, and then click **Marvell® Wireless Soft_g_SoftAP Configuration Utility** to display the Select Operation Mode screen. Click the check box by **Turn Radio Off** to make it checked, then click **OK**.

Appendix B:
VAIO Media Software: Local Area Networks

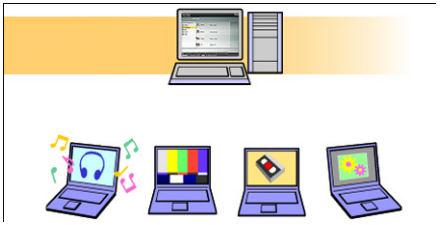
VAIO Media™ software expands digital entertainment possibilities by delivering your music, video, and still image files to any computer on your home network, located anywhere in your home! Set up one of the VAIO® computers on your home network to act as a media server, then get ready to share the fun and memories with your family and friends.

- VAIO Media™ Software Overview
- VAIO Media™ Software System Requirements
- Setting Up a Client Computer
- Preparing Your Multimedia Content
- Starting VAIO Media™ Console
- Using VAIO Media™
- Using an Analog Device for Video Playback

Overview

VAIO Media™ software makes it possible to share music, video, and photos with other VAIO® computers on your wired or wireless network. Set up one or more computers on your network as media servers and install the VAIO Media™ client software on the other computers. The computers with the VAIO Media™ client software installed can access multimedia content stored on the VAIO Media™ server computers.

VAIO Computer Network



The VAIO® computer that is designated as the media server can store and deliver:

- **Music files** — Supporting music files in MP3, WAV, OpenMG™ (ATRAC3®), and WMA formats. Use SonicStage® or SonicStage® Mastering Studio™ software to create music playlists to share on your network. Music files in MP3, WAV, and WMA formats can be placed in folders and registered to the VAIO Media Server. The network's client computers can access these music files.
- **Video files** — Supporting Video Capsule files created by Giga Pocket® software and TV programs recorded with Media Center. Video files in DVAVI, MPEG, MPEG2, DIVX, and WMV formats can be placed in folders and registered to the VAIO Media™ Server. The network client computers can access these video files.

  Note: A DIVX encoder program must be installed on your computer, to enable playback of files in DIVX format.

- **Still image files** — Supporting picture files in JPEG, GIF, BMP, PNG, and TIFF formats. Still images can be placed in folders and registered to the VAIO Media Server. The network client computers can access these network files.
- **TV broadcast** — VAIO® computers equipped with Giga Pocket software can stream a live TV signal to other VAIO® computers connected to your network.
- **Analog stream** — VAIO® computers equipped with Media Center can stream an analog signal from a connected analog device, such as a VCR, through the TV server.

About Microsoft® Windows® XP Media Center 2005

Your new VAIO® computer has the Microsoft® Windows® XP Media Center operating system installed. When you start the Media Center software program for the first time, the Media Center setup process starts. Adjust the default settings before opening VAIO Media™ software on client and server computers.

See the **VGX-XL2A Digital Living System™ Entertainment Guide**, included with the packaging materials, and from this user guide, **Chapter 1: Getting Started**, the section titled **Media Center Edition 2005** for additional information about setting up Media Center and its features.

Important Note: VAIO Media Center computers can share recorded television program files with other VAIO® computers on your network, using VAIO Media software. Live TV viewing over a network is not supported by the Media Center.

VAIO Media™ Software System Requirements

You can open VAIO Media™ software on the server computer(s), register client computers to the server(s), and then share multimedia content between the network computers.

Server requirements

- The VAIO Media™ server requires VAIO® computers running Microsoft® Windows® XP Home Edition, Microsoft® Windows® XP Professional Edition, and Microsoft® Windows® Media Center Edition operating systems. VAIO Media™ software is not supported by other computers or environments.
- Connect the server and client computers through a wired network with ethernet cables or a wireless local area network (WLAN).

Client requirements

- All client computers must be VAIO® computers running Microsoft® Windows® XP Home Edition, Microsoft Windows XP Professional Edition, and Microsoft® Windows® Media Center Edition operating systems. VAIO Media™ software is not supported by other computers or environments.

- All client computers must be connected to the same network with a server using a router, ethernet cables, or a wireless LAN. Configure each client to use a router or an access point on the network.
- All client computers must have VAIO Media™ software, version 2.0 or later, installed before attempting to register.

Network requirements

The VAIO Media™ software network must meet one of the following network requirements:

- Use the Ethernet capability that is built into the VAIO® computer (10BASET/100BASE-TX/1000BASE-T).
- Use a wireless LAN interface:

  - IEEE 802.11a (recommended for music, image, and video files) (**Note**: Currently, this configuration is not supported by Sony.)

  - IEEE 802.11g (recommended for music, image, and video files)

  - IEEE 802.11b (recommended for music and images files)

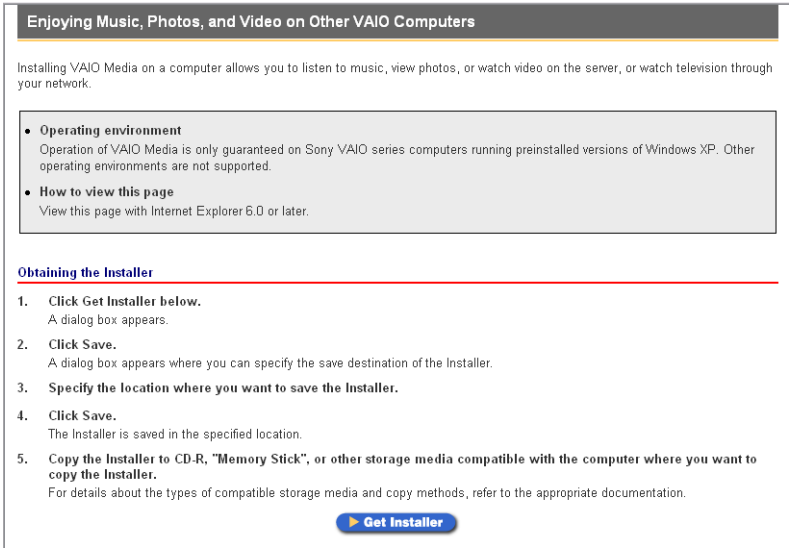
Note: IEEE 802.11b is not recommended for video files due to bandwidth constraints.

Setting Up a Client Computer

From the server, copy and distribute the VAIO Media™ installer file to the client computers.

To copy and distribute the installer file

1. Click **Start** on the Windows taskbar, and point to **All Programs**.
2. Point to **VAIO Media**, and click **Install VAIO Media to other VAIO PCs**. The Enjoying Music, Photos, and Video on Other VAIO computers window appears.


Enjoying Music, Photos, and Video on Other VAIO Computers
Installing VAIO Media on a computer allows you to listen to music, view photos, or watch video on the server, or watch television through your network.
Operating environment
Operation of VAIO Media is only guaranteed on Sony VAIO series computers running preinstalled versions of Windows XP. Other operating environments are not supported.
How to view this page
View this page with Internet Explorer 6.0 or later.
Obtaining the Installer
1. Click Get Installer below.
A dialog box appears.
2. Click Save.
A dialog box appears where you can specify the save destination of the Installer.
3. Specify the location where you want to save the Installer.
4. Click Save.
The Installer is saved in the specified location.
5. Copy the Installer to CD-R, "Memory Stick", or other storage media compatible with the computer where you want to copy the Installer.
For details about the types of compatible storage media and copy methods, refer to the appropriate documentation.
Get Installer

3 Click Get Installer. A file download message box appears.

4 Click Save. Save the file, **VM31Inst.exe**, to a blank storage media, such as a CD-R, CD-RW or Memory Stick® media, to transfer and set up the installer program on each client computer.

Note: The VM31Inst.exe is 23 MB in size. Verify your storage media's capacity before attempting to save the program.

Register a client computer

Your server computer must be turned on during client registration to enable the registration of each client computer. You can register only one client at a time. If more than one client computer is actively seeking registration, the server computer recognizes all registration requests. (A message appears to notify of multiple registration requests.) You must restart the registration process for each client.

Begin the client computer registration process after you have installed the **VM31Inst.exe** file to the client.

To register a client computer

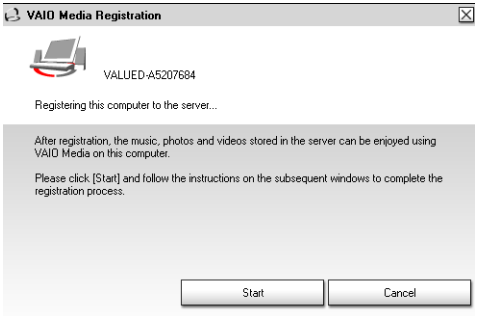
1 Save the installer program to the client computer, and then double-click to open and install it.

Follow the on-screen instructions on each screen.

2 Restart the client computer after installing the file. VAIO Media™ software appears in the **Start** menu.

3 Click **Start** on the Windows® taskbar, and point to **All Programs**.

4 Point to **VAIO Media™**, and then click **Register to VAIO Servers**.

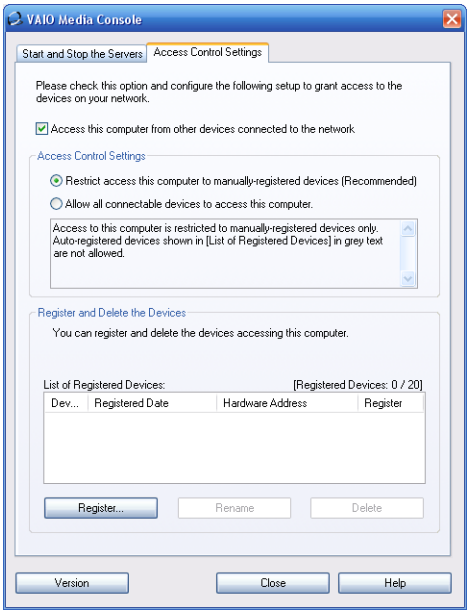

VAIO Media Registration
VALUED-A5207684
Registering this computer to the server...
After registration, the music, photos and videos stored in the server can be enjoyed using VAIO Media on this computer.
Please click [Start] and follow the instructions on the subsequent windows to complete the registration process.
Start
Cancel

5 Follow the on-screen instructions to complete the VAIO Media™ Registration wizard.

On the server computer, follow these steps:

1 From the **Start** menu, point to **All Programs**, and then point to **VAIO Media™**.

2 From the VAIO Media submenu, point to **Server Administration**, and click to open **VAIO Media Console**. The VAIO Media Console window appears.


VAIO Media Console
Start and Stop the Servers
Access Control Settings
Please check this option and configure the following setup to grant access to the devices on your network.
Access this computer from other devices connected to the network
Access Control Settings
Restrict access this computer to manually-registered devices (Recommended)
Allow all connectable devices to access this computer.
Access to this computer is restricted to manually-registered devices only. Auto-registered devices shown in [List of Registered Devices] in grey text are not allowed.
Register and Delete the Devices
You can register and delete the devices accessing this computer.
List of Registered Devices:
[Registered Devices: 0 / 20]
Dev...
Registered Date
Hardware Address
Register
Register...
Rename
Delete
Version
Close
Help

3 From the Access Control Settings tab, select the check box **Access this computer from other devices connected to the network**.

4 Select the option, **Restrict access to this computer to manually registered devices** [Recommended]. This option only allows registered computers access to the server.

Note: To allow VAIO® computer access to the server, select the option **Allow all connectable devices to access this computer**.

5 Click **Register**. The VAIO Media™ Registration wizard appears. Sony recommends selecting the option **Automatically register devices when connected to the network**.

6 Click **Next**. Registration requests from network clients or devices appear.

If you want to use a confirmation number to register your computer, verify that the **Use the confirmation number to register your device** option is selected.

Note: Standby mode is automatically canceled five minutes after clicking **Next**.

7 From the server computer, accept the new client.

As the server and client computers recognize each other, the server computer generates a four-digit number for the client. Type this number on the client machine. Each client computer has a unique number that cannot be used by the other clients on the network.

Note: If the registration process is cancelled, no number is generated. The registration process must begin again for that client computer.

8 Restart the client computer, if necessary. A new icon, **VAIO Media™**, appears on the client's desktop.

The installation is complete and the registered client computer can access media files stored on the VAIO Media™ server.

Preparing Your Multimedia Content

You can use pre installed Sony® software programs to prepare your multimedia content for sharing across the network using VAIO Media™ software.

To prepare your multimedia content

VAIO Media Console™ software can manage different media server features to deliver various file formats.

- **VAIO Media Music Server™** software delivers music files — Use SonicStage® or SonicStage Mastering Studio™ software to create playlists of music files. The VAIO Media Music Server software automatically makes these playlists and other music files stored in registered folders, available to Microsoft® Windows® XP Media Center and the client computers on your network.
- **VAIO Media Photo Server™** software delivers image files — Use the Photo Server to deliver pictures for Media Center and the client computers on your network. VAIO Media Photo Server software recognizes .JPG, .JPEG,.BMP, .GIF, and .TIFF file formats.
- **VAIO Media Video Server™** software delivers video files — Media Center records TV programs and VAIO Media Video Server software delivers the recorded contents to the client computers on your network. You can also use a VAIO® computer with Giga Pocket® software, version 5.0 or later, to create Video Capsules. Video files using DV-AVI, MPEG1, MPEG2, DIVX, and WMV file formats can be stored in registered folders and accessed by the client computers on your network.

Notes:

- Giga Pocket® Personal Video Recorder software creates video content called Video Capsules, which are stored in locations known as cabinets
- Giga Pocket® Personal Video Recorder hardware and software features are not installed on VAIO® computers running under the Microsoft® Windows® XP Media Center operating system.
- A DIVX encoder program must be installed on your computer to enable playback of files in DIVX format.

- **VAIO Media™ TV Server** software delivers an analog stream — You can connect analog devices, such as a VCR, to a computer equipped with Media Center and stream video to other VAIO® computers in your network.

Note: VAIO Media software does not support live TV viewing across the network on your computer equipped with Media Center. Only VAIO computers equipped with Giga Pocket software support live TV viewing across the network through the TV server.

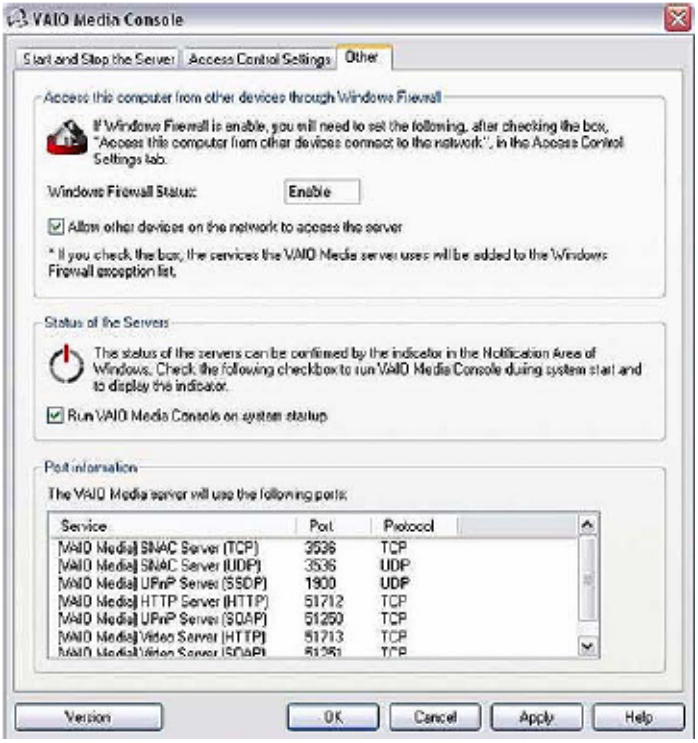
Starting VAIO Media Console™

VAIO Media Console™ software manages all of the Media Servers, enabling you to register and grant access to the client computers on your network. You can also register folders containing video, music, and still image contents. When a folder is registered with VAIO Media Console, the contents can be accessed by the network's client computers and devices.

To configure client and server access

- Click **Start** in the Windows® taskbar, and then point to **All Programs**, **VAIO Media**, **Server Administration**, and click **VAIO Media Console**.

  The VAIO Media™ Console software window appears.


VAIO Media Console
Start and Stop the Server
Access Control Settings
Other
Access this computer from other devices through Windows Firewall
If Windows Firewall is enable, you will need to set the following, after checking the box, "Access this computer from other devices connect to the network:", in the Access Control Settings tab.
Windows Firewall Status:
Enable
Allow other devices on the network to access the server
* If you check the box, the services the VAIO Media server uses will be added to the Windows Firewall exception list.
Status of the Servers
The status of the servers can be confirmed by the indicator in the Notification Area of Windows. Check the following checkbox to run VAIO Media Console during system start and to display the indicator.
Run VAIO Media Console on system startup
Port information
The VAIO Media server will use the following ports:
Service
Port
Protocol
[VAIO Media] SNAC Server (TCP) 3536 TCP
[VAIO Media] SNAC Server (UDP) 3536 UDP
[VAIO Media] UPnP Server (SSDP) 1900 UDP
[VAIO Media] HTTP Server (HTTP) 51712 TCP
[VAIO Media] UPnP Server (SOAP) 51250 TCP
[VAIO Media] Video Server (HTTP) 51713 TCP
Version
OK
Cancel
Apply
Help

The VAIO Media Console™ allows you to:

- Check the status of your servers.
- Troubleshoot problems.
- Start and stop all media servers.
- Identify devices registered to the server.
- Register folders.
- Add password protection.
- Enable or disable access by other computers on the network through the Windows® Firewall.
- Run the software when the system starts.

To make additional content available to the network

After creating additional playlists, recorded TV programs, or other video content, you can make them available to client computers on your network.

1. Create or add new content, such as playlists, recorded TV programs, and still images, to registered folders.
2. Close VAIO Media™ software, if it is running.
3. Refresh the VAIO Media™ software. Information about the new content is updated when the server software starts again.

Note: When you stop and restart the server, it displays new connections and refreshes the content on the network computers.

Using VAIO Media™

VAIO Media™ uses your network servers to view images and video or listen to music

To use VAIO Media™

1. Click **Start** in the Windows® taskbar, and then point to **All Programs**, **VAIO Media**, and then click **VAIO Media**. The VAIO Media™ Main Menu window appears.

2 Click the type of content you want to view or listen to (Music, Photo, Video, or TV). VAIO Media™ software searches for an available VAIO Media computer on your network. Search results include the following

- If more than one VAIO Media™ computer is found, the **Please select a server window** appears. Select a VAIO Media™ computer from the list.
- If only one VAIO Media™ computer is found on your network, the **Please select a server window** appears, displaying available music or video contents. A Folder/Photo Lists window appears if you have selected **Photo** from the main menu. A Channel List window appears if you have selected **TV** from the main menu.

3 Click the computer, image folder, video cabinet or channel you want to access.

Accessing VAIO Media™ Help

For more information about using the VAIO Media™ software program, follow these steps:

- Click **Start** in the Windows® taskbar, and point to **All Programs**, V**AIO Media**, and then click **Help**.

Using an Analog Device for Video Playback

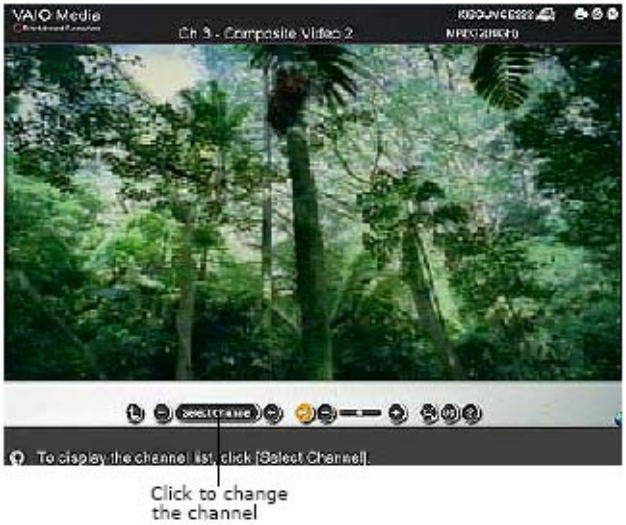
You can stream video content from an analog device, such as a VCR, using the VAIO Media TV server software, and watch video playback on your computer or across the network.

To set up an analog device

1. Connect one end of the A/V cable to the Video Out port on your analog device.
2. Connect the other end of the A/V cable to the Composite Video In jacks, located on the front or back of your computer equipped with Media Center.
3. Begin playback using the analog device.
4. On your computer, click **Start** on the Windows task bar and point to **All Programs**, **VAIO Media**, and then click **VAIO Media**.

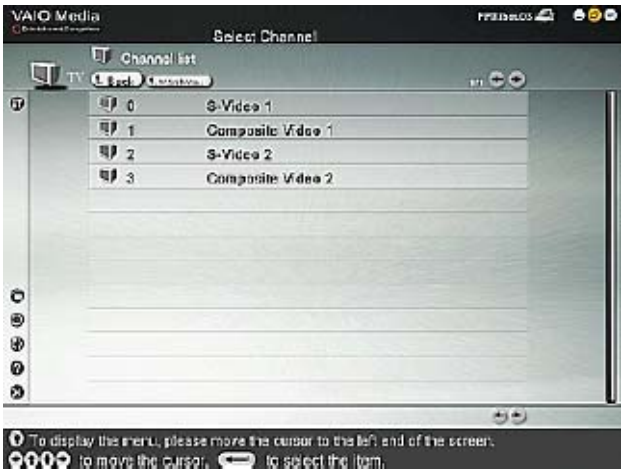
5. Click TV. One of the following windows appears:
   - If there are other TV servers that can stream analog input on your network, VAIO Media™ software displays them on the server list. Click to select the computer equipped with Media Center from the server list.

- If your computer is the only TV server on the network that can stream analog input, then playback begins.



If the playback window is empty, click **Select Channel**. VAIO Media™ software assigns a channel to each A/V input jack. You may need to change the channel to view the video.

The Channel list window appears.


VAIO Media
Select Channel
Channel list
TV
0 S-Video 1
1 Composite Video 1
2 S-Video 2
3 Composite Video 2
To display the menu, please move the cursor to the left end of the screen.
to move the cursor,
to select the item.

Click to change the channel.

Summary

This appendix covered VAIO Media™ software included with your XL2A computer for wireless or wired LAN installations.

Appendix C:
Setting Up Digital TV

This appendix guides you through the steps to use in Microsoft® Windows® Media Center Edition operating system for setting up the ATSC digital TV tuner in your XL2A computer, and also takes you through the steps for setting up the required components such as the internet connection for your XL2A computer, and then using MCE for setting up TV stations for Digital TV. You can also refer to the following link to the Microsoft website for step by step instructions on how to setup Media Center PC with the ATSC digital TV tuner:

http://www.microsoft.com/windowsxp/mediacenter/using/hdtv/setup.mspx

Advantages of Digital TV with Media Center

Some advantages of Digital TV using Media Center are:

- **Screen Resolution** - Screen resolutions of more six times that of traditional analog programming - super-sharp images.
- **Screen Aspect Ratio** - 16:9 aspect ratio provides a widescreen picture for a more theater-like experience.
- **Dolby Digital Suppor**t - Up to six channels of sound can be encoded into an ATSC OTA (Over The Air) broadcast.
- **Digital Signal** - No more snowy picture or ghost images
- **Cost** - Hardware needed to receive ATSC Over The Air (OTA) TV broadcasts can be inexpensive - a $15 traditional VHF/UHF/FM antenna can work as well as a $150 antenna. Antennas can be indoor ‘rabbit ears’ or ‘fish bone’ type or outdoor roof-/poll-/chimney-mounted type. **Note**: For the best viewing results, it is recommended to place the outdoor antenna as high as possible.
- **Analog and Digital Recording** - Media Center can record one analog TV broadcast and one digital TV broadcast at the same time - watch one type of broadcast while recording another type for viewing at a later time.

- **Appreciated by All** - A HDTV set is not necessary to see the difference between an analog broadcast and a HD broadcast.
- **Converting HD Content to DVD-Video** - Media Center can back up recorded TV HD content to DVD and make DVD-Video discs of your recorded TV high definition shows. If the show was originally broadcast in a 16:9 widescreen aspect ratio, Media Center will retain that ratio.

Disadvantages of Digital TV with Media Center

- **You either get it or you don't** - If you live in an area that blocks the broadcast signal, your DTV tuner may not be able to receive all or any DTV stations.
- **DVD-Video is not high definition** - A common misconception is that DVD-Video is high definition. It is not. When Media Center creates a DVD-Video disc from HD television content, the resolution is automatically lowered to analog television standards. The picture is still good, but not as good as the original broadcast(s).
- **Hard disc storage space** - HD content takes up about twice as much hard disc storage space as analog, standard definition content**.**

Using MCE to Set Up Required Components

1 Start Media Center. The Media Center Setup Wizard appears. Select **Next**.

MediaCenter
Welcome
to the Media Center setup wizard
Media Center is where you can access TV, music, pictures, videos, DVDs and more with a remote control.
Select Next to begin
Next
Cancel

2 From the Media Center Setup screen, select **Next**.

MediaCenter
Media Center Setup
To set up Media Center you will be asked to complete two sections:
1 Required Setup. Media Center checks components like networking and Internet connection.
2 Optional Setup. You can set up the features and advanced settings that fit your needs.
Back
Next
Cancel

3 From the Media Center Privacy Policy screen, select **Next**.

MediaCenter
Media Center Privacy Policy
Microsoft is committed to protecting your privacy. To learn more about how your privacy may be impacted when Media Center connects to the Internet, review the privacy policy below.
Media Center Privacy Policy
Back
Next
Cancel

4 From the Help Improve Media Center screen, select whether or not you would like to join the Customer Experience Improvement Program, then click **Next**.

MediaCenter
Help Improve Media Center
Join the Customer Experience Improvement Program and help improve Microsoft software and services. If you choose to join, your computer will periodically send Microsoft anonymous reports about Media Center's performance.
Yes, I'd like to join
No thank you
Learn more about this setting
Back
Next
Cancel

5 From the Enhanced Playback screen, select **Yes**, and then click **Next**.

Enhanced Playback
MediaCenter
Get the Most from Media Center
Media Center can connect to the Internet to get cover art for albums and DVDs, music and movies information, and TV Program Guide listings to schedule recordings.
About Privacy
Do you want Media Center to automatically connect to the Internet to get this information?
Yes
No
Back
Next
Cancel

6 From the Join Wireless Network screen, select whether or not you would like to join a wireless network, and then click **Next**.

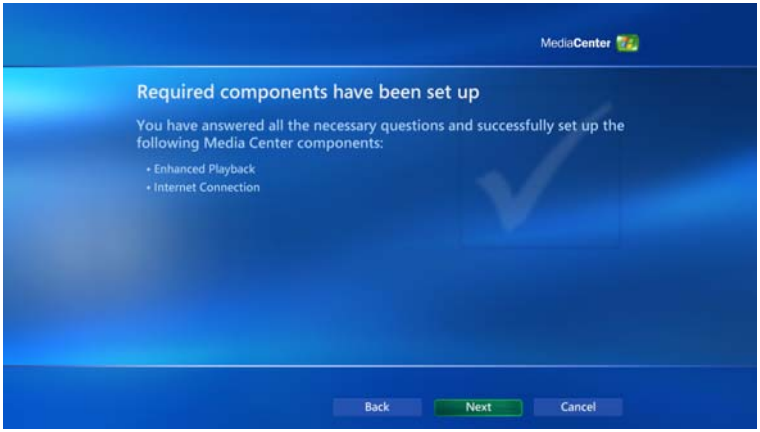
Join Wireless Network
MediaCenter
Join a Wireless Network
You can use the Join Wireless Network Wizard to connect this PC to a wireless network.
Selections made during this wizard may overwrite your existing wireless network settings. Select No if you wish to use your existing wireless network settings or if you do not wish to connect to a wireless network connection at this time.
Would you like to use the Join Wireless Network Wizard?
Yes
No
Back
Next
Cancel

7 From the Internet Connection screen, select whether or not you have "**always on**" Internet connection, and then click **Next**.

Internet Connection
MediaCenter
"Always on" Internet Connection
If your Internet service is provided through a cable modem, a DSL modem, or a similar broadband device, it is likely that your connection is "always on."
Do you have an "always on" Internet Connection?
Yes
No
Back
Next
Cancel

8 From the Internet Connection screen, select Test to have Media Center test for your Internet connection. When complete, click **Next**.

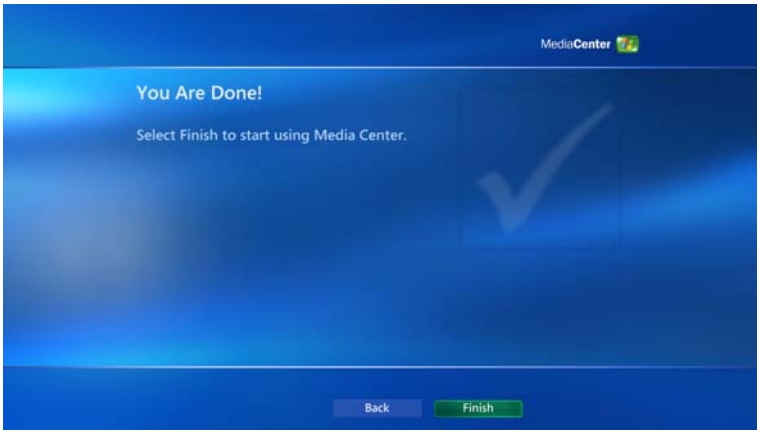
9 From the Required Components setup confirmation screen, select **Next**.


MediaCenter
Required components have been set up
You have answered all the necessary questions and successfully set up the following Media Center components:
• Enhanced Playback
• Internet Connection
Back
Next
Cancel

10 From the Optional Setup screen, select **I am Finished**, and then click **Next**.

MediaCenter
Optional Setup
If you want to customize Media Center, select from the list.
Configure tuners, TV signal, and Guide
Optimize how Media Center looks on your display
Set up your speakers
I am finished
Next
Cancel

11 From the You Are Done screen, click **Finish** to start using Media Center.



Using MCE to Set Up Digital TV

1 After setting up the required components (see previous steps 1 through 11), select **Settings** from the Media Center **Start** menu.

2 From Settings menu screen, select **TV**.

3 From the TV menu screen, select **Set Up TV Signal**.

4 From TV Signal Setup confirmation message, select **Yes**.

TV
SETTINGS
Recorder
Guide
Set Up TV Signal
Digital TV Antenna Signal Strength
Configure Your TV or Monitor
Audio
Captions
TV SIGNAL SETUP
Changing these settings will affect any TV recording that is currently in progress or scheduled to start while you are in this wizard. Also, any TV or radio session on an Extender device may be interrupted. Do you want to continue?
Yes
No

5 From Set Up Your TV Signal screen, select **Next**.

6 From the TV Signal screen, confirm your region for your local television services. Select Yes if your region is correct, and then click **Next**.

TV Signal
MediaCenter
Confirm Your Region
The region you select is used to configure your Media Center PC for local television services.
Current region: United States
Is this the correct region?
Yes, use this region to configure TV services
No, I want to select a different region
Help
Back
Next
Cancel

7 From the TV Signal display, select the manual configuration TV signal choice, and then click **Next**.

TV Signal
MediaCenter
Automatic TV Signal Setup
Media Center can automatically detect and configure your TV signal in most cases. This process may take as long as five minutes depending upon your configuration.
How would you like to proceed?
Configure my TV signal automatically (Recommended)
I will manually configure my TV signal
Help
Back
Next
Cancel

8 From the TV Signal display, select the type of standard TV signal you receive, and then click **Next**.

TV Signal
MediaCenter
Select Your TV Signal
With Media Center, you can watch and record TV on your computer. If both a standard TV signal and a Digital TV Antenna are connected, the Digital TV Antenna will be configured later.
What type of standard TV signal do you receive?
Cable
Satellite
Antenna
Help
Back
Next
Cancel

9 From the TV Signal screen, select whether or not you have a Set-top Box device, and then click **Next**.

TV Signal
MediaCenter
Do You Have a Set-top Box?
Sometimes TV signal is received through a controller box, or "set-top box" supplied by your TV service provider. If you have a set-top box, the Media Center remote control needs to work with it. Do you have a set-top box?
Yes
No
Help
Back
Next
Cancel

10 From the TV Signal screen, confirn whether or not you have a Digital TV Antenna connected, and then click **Next**.

TV Signal
MediaCenter
Connect Your Digital TV Antenna
Before you continue, please make sure your antenna is connected to the Digital TV tuner.
For more information on how to set up and position your antenna for the best signal reception, please contact your antenna manufacturer.
Is your Digital TV Antenna connected?
Yes
No
Help
Back
Next
Cancel

11 From the TV Signal screen, select Set Up Guide listings choice, and then click **Next**. **Note**: You must have a Internet connection to continue with the TV Program Guide setup.

TV Signal
MediaCenter
You Are Done!
You have configured your TV Signal to work with Media Center. The following settings will be saved:
TV Signal: Cable
Making changes to your TV signal source may require you to reset your TV Program Guide listings. Select Set Up Guide listings to do this now, or select Return to TV Settings to finish.
Set Up Guide listings
Return to TV Settings
Help
Back
Finish

12 From the Guide screen, click **Next** to setup your Program Guide.

13 From the Guide screen, confirm that you want to view your Guide by reading the privacy statement and selecting **Yes**. Click **Next** to continue.

Guide
MediaCenter
Guide Privacy
The Guide provides TV program listings to help you find, watch, and record TV shows. If you use the Guide, anonymous information to improve the quality and accuracy of the service will be sent to Microsoft.
View the Guide privacy statement
Do you want to use the Guide?
Yes
No
Back
Next
Cancel

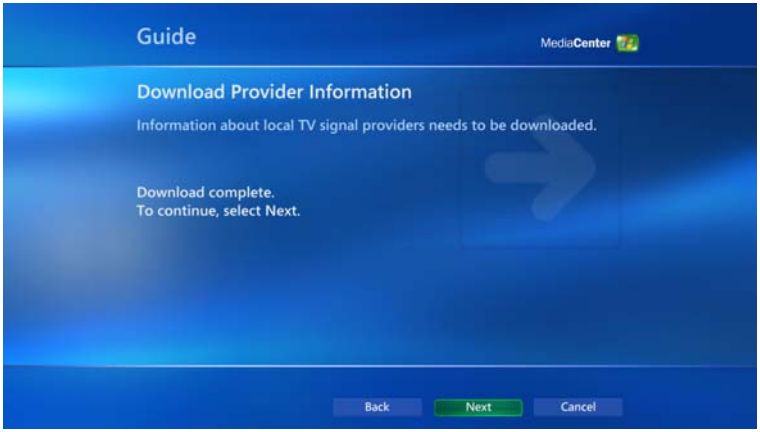
14 From the Guide screen, select **I agree** to the Guide Terms of Service, and then click **Next**.

Guide
MediaCenter
Guide Terms of Service
To receive TV Program Guide listings, you must agree to the following Guide Terms of Service:
Microsoft Windows XP Media Center Edition
ELECTRONIC PROGRAMMING GUIDE TERMS OF SERVICE
Version 3.0
The Microsoft software product identified above, which includes computer software and may include
I agree
I do not agree
1 of 58
Back
Next
Cancel

15 From the Guide screen, enter your ZIP code, and then click **Next**.

16 From the Guide screen, confirm that that you can connect to the Internet to get your Provider Information, and then click **Next** to continue.

17 From the Guide screen, click **Next** after the download is complete.

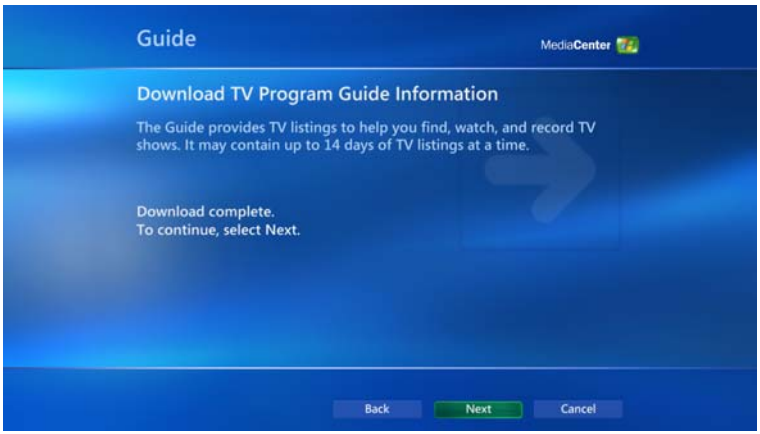


18 From the Guide screen, select your TV signal provider from the list, and then click **Next**.

19 From the Guide screen, observe the download status of your TV Program Guide information.

Guide
MediaCenter
Download TV Program Guide Information
The Guide provides TV listings to help you find, watch, and record TV shows. It may contain up to 14 days of TV listings at a time.
Status: Downloading. This may take a few minutes..
Back
Next
Cancel

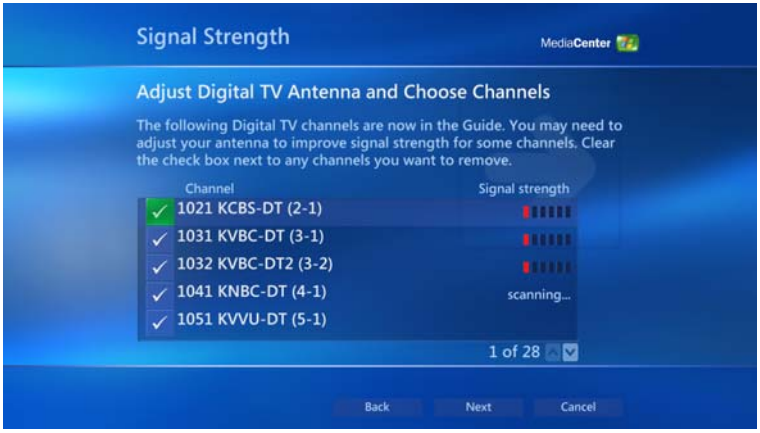
20 From the Guide screen, click **Next** when the download is complete.


Guide
MediaCenter
Download TV Program Guide Information
The Guide provides TV listings to help you find, watch, and record TV shows. It may contain up to 14 days of TV listings at a time.
Download complete.
To continue, select Next.
Back
Next
Cancel

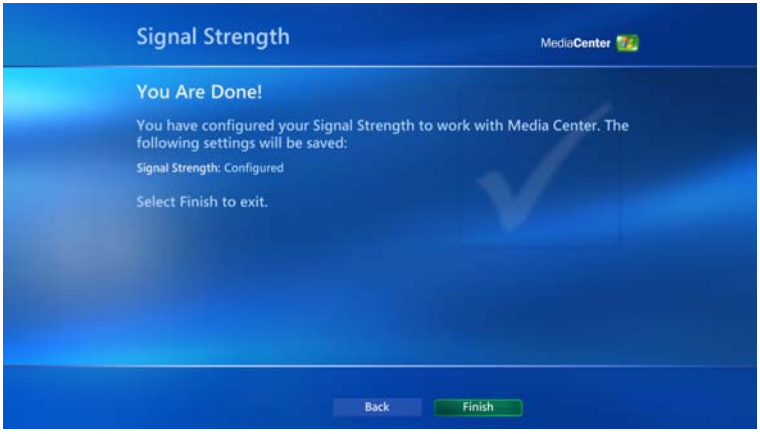
21 From the Signal Strength screen, click **Next** to continue.

Signal Strength
MediaCenter
Digital TV Antenna Signal Strength
Using the Signal Stength meter you can adjust your Digital TV Antenna to improve reception of over-the-air Digital TV. You may also wish to remove stations from the list that you are unable to receive.
Select Next to continue.
Back
Next
Cancel

22 From the Signal Strength screen, you can view the signal strength on selected channels for making antenna adjustments, or to remove unwanted channels. Click **Next** when completed.


Signal Strength
MediaCenter
Adjust Digital TV Antenna and Choose Channels
The following Digital TV channels are now in the Guide. You may need to adjust your antenna to improve signal strength for some channels. Clear the check box next to any channels you want to remove.
Channel
Signal strength
1021 KCBS-DT (2-1)
1031 KVBC-DT (3-1)
1032 KVBC-DT2 (3-2)
1041 KNBC-DT (4-1)
scanning...
1051 KVVU-DT (5-1)
1 of 28
Back
Next
Cancel

23 From the Signal Strength screen, click **Finish** if you are satisfied with the selected channel signal strength and exit. Click **Back** to return to the MCE signal strength meter.


Signal Strength
MediaCenter
You Are Done!
You have configured your Signal Strength to work with Media Center. The following settings will be saved:
Signal Strength: Configured
Select Finish to exit.
Back
Finish

Taking Control of Your Digital TV

After setting up your TV stations, you can watch live TV, record your favorite show for later viewing, or even view the latest listing of current television programming.

1 To take control of your TV and make your choices, select My TV from the MCE Start menu.

See the XL2A DLS Entertainment Guide for more detailed information on My TV features using MCE.

2 To view the latest listing of television programming, select Guide.

You can view and scroll through the list of current and future TV shows in the Guide. When you select a program, information about the program displays below the program listings.

Creating DVD-Video from HD Recorded Content

The following procedure provides informtion on how to make a DVD-Video disc from ATSC OTA-recorded high definition TV content using Media Center.

1 Insert a recordable blank DVD disc into the slot of the optical drive.

2 Start Media Center.

3 Select **More Programs** from the Start menu.

4 Select **Create CD/DVD** from the More Programs main screen.

The DISK FORMAT screen appears.

5 Select **Video DVD**, and then select **OK**.

6 From the NAME THIS DVD screen, enter a name for the DVD. When complete, select **OK**.

7 From the SELECT MEDIA screen, select Recorded TV.

The next screen that appears contains a list of all TV shows and movies that have been recorded through your TV using Media Center.

8 From the RECORDED TV screen, select the high-definition content you wish to copy onto the DVD disc.

create dvd
RECORDED TV
Sort by Date
Sort by Title
View DVD
Cancel
Add More
Conan O'Brien - SD - "Ch 3, 1 11/25
Conan O'Brien - HD - "Ch 10 11/25
Finding Nemo - SD - "Ch 13, 11/24
Finding Nemo - HD - "Ch 11 11/24
7 of 9
Finding Nemo - HD
"Ch 1131, 8:30 PM" KTNV-DT 8:30 PM
Thu, Nov 24 2 hours 30 minutes
ATSC_To_DVD
0 items
0 Minutes selected

If the size of the selected content is outside Media Center's usable limit, a message appears asking if you would like to lower the content quality so that it fits on the DVD disc.

create dvd
RECORDED TV
Sort by Date
Sort by Title
View DVD
Cancel
Add More
Conan O'Brien - SD - "Ch 3, 1 11/25
Conan O'Brien - HD - "Ch 10 11/25
Finding Nemo - SD - "Ch 13, 11/24
Finding Nemo - HD - "Ch 11 11/24
7 of 9
FIT CONTENT TO CD/DVD
You have selected more content than will fit on the CD/DVD. Would you like the quality of the content to be lowered so that it fits?
Yes
No
9 recordings 11 hours
ATSC_To_DVD
0 items

9 Select **Yes** to reduce the quality to continue. If you select **No**, the Create CD/DVD process will be terminiated. A checkmark appears to the right of the selected high definition content title.

10 Select View DVD.

create dvd
RECORDED TV
Sort by Date
Sort by Title
View DVD
Cancel
Add More
Conan O'Brien - SD - "Ch 3, 1 11/25
Conan O'Brien - HD - "Ch 10 11/25
Finding Nemo - SD - "Ch 13, 11/24
Finding Nemo - HD - "Ch 11 11/24
7 of 9
9 recordings 11 hours 20 minutes total
ATSC_To_DVD
1 item
149 Minutes selected

The VIEW DVD screen appears confirming that the content was recorded from the ATSC tuner, the length of the selected content, the channel it was recorded from, and the given title of the content/disc.

11 Select **Create DVD**. A message appears asking you to confirm the creation of the disc.

12 Click **Yes**. The creation pocess begins.

13 A message appears displaying a progress bar. The time necessary to create the disc can be quite lengthly and depends on the size and quality of high definition content selected.

During this process you have the option to access other areas on the computer, if desired. Select **OK** to “do other things” or you can select **Stop** to terminate the Create CD/DVD process.

Create CD/DVD Notes

- High definition content recorded through the ATSC digital TV tuner card tends to be encoded in display resolutions much higher than DVD-Video.
- When burning high definition content to DVD-Video, the resulting disc is no longer considered to be high definition. Remember, DVD-Video is not, and never was, considered high definition.
- If the high definition content was originally encoded with a 16:9 ratio, Media Center will retain that ratio so that the resulting display continues to look correct on widescreen television sets.

Frequently Asked Questions

1. **I have Digital Cable at Home (Comcast), can I connect the digital cable coax into the DLS ATSC tuner HDTV tuner card?**

   No, the HDTV tuner card in your MCE system supports only “over-the-air” digital broadcast, not digital cable or digital satellite service.You can still connect your cable to the Sony Cable TV Tuner and record analog cable broadcasts, just not digital cable programming. You can also use the ATSC HD Tuner to connect to an ATSC antenna to enjoy Over-The-Air local broadcasts.

2. **I just purchased an indoor or outdoor HD antenna, but how do I know which direction to face the antenna to?**

   Visit the website URL http://www.antennaweb.org to obtain directions on where your digital antenna should point.

   There is also an option to bring up your location map that will have a drawing showing the directions and what channels are available in that direction, use a compass and this map to align your antenna for the best signal reception.

3. **I still have my old antenna on the roof; can I use it to pick up ATSC channels?**

   You should be able to; ATSC uses the same frequencies as analog NTSC TV with an antenna. You may need to adjust your roof antenna and refer to http://www.antennaweb.org for map orientation of your local ATSC stations.

4. **How can I increase my signal strength?**

   In some cases a signal amplifier can be paired with the antenna to increase signal strength.

5. **Can I add a splitter to split the cable?**

   If you need to split the signal, use an HDTV-compliant splitter of at least 5 - 1100Mhz. Make sure that you are not getting a combiner. Though combiners and splitters look very similar, if not identical, a combiner will not properly split the signal.

6. **Why can't I receive all of the channels in the MCE TV guide?**

   You might not be able to receive all channels broadcasted in your area if the antenna does not receive the appropriate range of signal on the MHz scale for digital TV channels, is located near any tall buildings or hills that obstruct the line of sight to the broadcasting antenna, or if you are to far away from the broadcasting signal.

7 **Where should I check online to see the TV listings besides MCE TV guide?**

For free over-the-air Digital TV programming schedules, visit these websites http://www.checkhd.com, or http://www.titantv.com.

8 **Why is my Media Center PC getting fewer channels than my HDTV set in my living room? Why does** http://www.antennaweb.org **show more ATSC channels then I am able to get?**

The channel lineup info is derived from the FCC and may have discrepancies. You can add missing ATSC channels manually. In Media Center, go to Setup-> TV -> Guide -> Add Missing Channel -> Add DTV Channel. Refer to http://www.antennaweb.com to get details on channel information. Refer to the Microsoft website for Step By Step instructions at http://www.microsoft.com/windowsxp/mediacenter/using/hdtv/setup.mspx.

Summary

This completes the Setting Up Digital TV Appendix. If you still have unanswered questions, go to VAIO® Support Central and select a support option.

Appendix D:
Hard Disk Drive Recovery

Overview

Welcome to Sony VAIO® Hard Recovery system. The VAIO Recovery system is made up of six different tools or programs to help you manage and maintain your Sony VAIO® computer. The various tools provide options to restore your computer to the original factory settings, reinstall specific factory-installed software applications and drivers, and assist in the configuration of RAID arrays for your hard disk. The six tools that make up the VAIO® Recovery System include:

- Create Recovery Discs
- Restore Windows® Only
- Reinstall Drivers or Application
- Restore C: Drive
- Restore Complete System
- Reconfigure RAID

Before you begin

IMPORTANT NOTE

Due to the constraints from using Component Video, if there is a need to recover your hard disk drive to its original out-of-the-box state, Sony recommends using the supplied HDMI cable and the HDMI-to-DVI adapter (if needed) with a display that supports HDMI or DVI-D input.

There are many things that can affect your computer's performance, such as adding/removing software, the working condition of peripherals, and a virus downloaded from the Internet. If you are experiencing difficulties with your computer's performance, it can be very difficult to troubleshoot. You may decide that the best option is to restore your system back to its original factory settings.

Note: Turn off screen savers before you begin any of the VAIO® Hard Disk Drive Recovery options.

Before considering any of the options available in VAIO® Recovery, please review the following support site for the latest up-to-date information specific to your computer model:

www.esupport.sony.com

Back up Your Data

WARNING - Before attempting any of the options in the VAIO® Recovery System, it is important to back up your data. Recovery operations can delete some or all of your data, depending on the selected recovery program.

Manage CDs and DVDs

The following types of media, CD or DVD, are supported to back up your data and/or to create the recovery discs necessary to perform some of the VAIO® Recovery options: **CD-R**, **DVD-R** and **DVD+R**.

Note: The following media are supported, but not recommended: CD-RW, DVD+RW, and DVD-RW. Double-layer DVD media is not supported.

The number of recordable CDs or DVDs required to create the recovery discs varies.

TIP: Always use the highest quality of media possible when creating recovery discs, or when backing up your data. You may experience problems creating discs if you use a poor quality of media.

Start VAIO Recovery

Sony equipped your computer with a hidden recovery drive partition, which contains the information and data necessary to restore your main C: drive partition, or to restore factory-installed programs and software drivers.

There are three methods you can use to access the VAIO Recovery® tools. The reasons for using a particular method varies with the current state of your computer. The three methods include: (1) Recovery Discs, (2) Windows Start menu, and (3) F10 Function key on your key board.

Recovery Discs

Use the recovery discs to restore your system if:

- the main hard disk is replaced, or if the data becomes corrupted
- the hidden recovery drive partition has been removed from the hard disk
- restoring the system after changing the configuration of a RAID disk array (on VAIO models configured for RAID storage).

To access VAIO® Recovery using the recovery discs

1. Insert disc number one into the applicable optical drive and close the drive.
2. Power off your computer.
3. Wait for approximately 30 seconds and power on your computer.
4. The VAIO Recovery options page appears.
5. Click the title name to select the desired option.

Windows Start Menu

If you have access to your computer's operating system, you can start the VAIO Recovery System using the Windows Start menu.

To access VAIO® Recovery using the Windows Start menu

Do one of the following:

- Click the Windows **Start** button, and from the menu select **Control Panel**. From the Category View, click **Performance and Maintenance**, and then click **VAIO Recovery**.
- Click the Windows **Start** button, and from the menu select **Control Panel**. From the Classic view, click **VAIO Recovery**.

- Click the Windows **Start** button, point to **All Programs**, and click **VAIO Recovery**. Then from the submenu, click **VAIO Recovery**.
- Click the Windows **Start** button, point to **All Programs**, **VAIO Recovery Tools**, and then click the desired Recovery Tool from the submenu.

F10 Function Key

You can use the F10 function key on your keyboard to start VAIO Recovery, however, you will only have access to the **Restore C: Drive** option.

To access Restore C: Drive using the F10 function key

1. Power off your computer.
2. Wait for approximately 30 seconds and power on your computer.
3. When the **VAIO** logo appears, press the **F10** key (several times) on your keyboard.

   The VAIO® Recovery option Restore C: Drive appears.

Note: You cannot access the VAIO Recovery main menu screen using the F10 method. Your computer will restart directly to the Restore C: Drive screen.

VAIO® Recovery Tools

The VAIO® Recovery system is made up of six different tools or programs to help you manage and maintain your Sony VAIO® computer.

- Create Recovery Discs
- Restore Windows® System
- Reinstall Drivers or Applications
- Restore C: Drive
- Restore Complete System
- Reconfigure RAID

These tools provide options to restore your computer to the original factory settings, reinstall specific factory-installed software applications and drivers, and assist in the configuration of RAID arrays for your hard disk.

Create Recovery Discs

Use the Create Recovery Discs option to create the media discs necessary to recover your computer data in the event of a hard disk failure. Creating the recovery discs ensures that you can restore your computer's operating system and pre installed software, even if the operating system and hidden recovery partition are not working.

You can create Recovery Discs using CD-R or DVD media.

Create Recovery Discs using CD-R media

To create the recovery discs using CD media

1. Start the VAIO HDD Recovery program. See Start VAIO Recovery on page 3.
2. From the VAIO® HDD Recovery menu screen, click **Create Recovery Discs**.
3. Read the on-screen Create Recovery Discs information. When complete, click **Next**. The **Create Recovery Discs (Step 1 of 3)** appears.
4. Depending on your choice of disc media (CD, DVD), click the appropriate option button. Sony recommends using **CD-R**, **DVD-R**, and **DVD+R** media.

   Remember - Always use the highest quality of media possible when creating Media Kit discs. You may experience problems creating discs if you use a poor quality of media.
5. Click **Next**. A message appears informing you to insert a blank disc.
6. Insert a blank media disc and click **OK**. The next screen, **Create Recovery Discs (Step 2 of 3)**, displays the name and supported format of each disc required to complete the Media Kit. This is for informational purposes only and requires no action on your part.
7. Click **Next**.

   A time bar displays the progress of the creation of the media disc. The **Time Remaining** field displays the time left to complete the writing process for all required discs. Once the disc is full, a message appears requesting that you insert the next disc, if necessary. Click **OK** to continue.

   Tip: Label each recovery discs to avoid confusion when using the discs for recovery procedures.
8. After the last disc is created, the **Create Recovery Discs (Step 3 of 3)** screen appears informing you that the creation process is complete. Click **Finish** to exit VAIO Recovery.

   This completes the VAIO Recovery option **Create Recovery Discs**.

Create Recovery Media using DVD media

Before you begin, make sure the VGX-XL2A Personal Computer is turned on.

To create recovery discs using DVD media

1. Have two (2) blank DVD discs (DVD-R/RW or DVD+R/RW) available. Insert a DVD disc into the slot for the optical disk drive in the XL2A computer.
2. Start Media Center.
3. From the Media Center **Start** menu, select **More Programs**. The More Programs screen displays.
4. Click **Manage Discs**. The Manage Discs screen displays with the New Discs Found message.
5. Click **Yes** on the New Discs Found message to perform a disc scan.
6. Click **OK** when the Disc Scan Complete message displays.
7. Close Media Center.
8. Start VAIO® Recovery.
   - From the Windows **Start** menu, point to **VAIO Recovery** and then click **VAIO Recovery**. The VAIO Recovery main menu screen displays.
9. Click **Create Recovery Discs** and carefully read the onscreen information.
10. Click **Next**. The Create Recovery Discs (Step 1 of 3) screen displays.
11. Select the option **Create recovery disc(s) using 2 DVD(s)** and click **Next**.

    The Create Recovery Discs (Step 2 of 3) displays with the message Create Recovery DVD 1/2.
12. Click **OK** on the Create Recovery DVD 1/2 message.

    The Create Recovery process begins. A message displays when the first DVD has been successfully created.
13. Click **OK**.
14. Start Media Center.
15. From the Media Center **Start** menu, select **More Programs**. The More Programs screen displays.
16. Click **Manage Discs**. The Manage Discs screen displays.
17. Click the **Eject** button next to the loaded disc icon. A Confirm Eject message displays.

18 Click **Yes**. Remove the disc from the optical drive slot and label it VGX-XL2A Recovery DVD 1/2. Then confirm that blank DVD disc 2 is loaded.

19 Close Media Center.

Note: If Media Center does not close using the mouse, press Alt + F4 on your keyboard.

20 Return to the VAIO® Recovery Create Recovery Discs (Step 2 of 3) screen and click **OK** on the message. The Create DVD process continues. When complete, the Create Recovery Discs (Step 3 of 3) screen displays infoming you that the final DVD disc was created successfully.

21 Click **Finish**.

22 Start Media Center.

23 From the Media Center **Start** menu, select **More Programs**. The More Programs screen displays.

24 Click **Manage Discs**. The Manage Discs screen displays.

25 Click the **Eject** button next to the loaded disc icon. A Confirm Eject message displays.

26 Click **Yes**. Remove the disc from the optical drive slot and label it VGX-XL2A Recovery DVD 2/2.

27 Close Media Center and store the Recovery DVD Discs in a safe location.

Restore Windows Only

This is a feature of Microsoft® Windows® operating system for restoring your computer to a previous working configuration from a designated point in time.

Before performing any restore or recovery options, go to the Sony online support Web site at **www.esupport.sony.com** and review your model-specific support page. Look for software driver updates, or check for knowledge base solutions that may help solve your computer's problems.

Start System Restore

The Microsoft® feature System Restore monitors changes to your computer's configuration and creates snapshots of the configuration before changes occur. If a problem develops with your system files, you may be able to resolve the problem by using System Restore to restore your system to a point before the problem developed.

Note: Using System Restore does not affect your personal data files such as documents, pictures, e-mail, and Internet favorites. In addition, changes made by System Restore are reversible.

To access System Restore

1. Start the **VAIO® Recovery** program. See Start VAIO® Recovery on page 3.
2. From the VAIO® Recovery menu screen, click **Restore Windows Only**.
3. From the Restore Windows Only screen, click the **Start System Restore** link.

The Microsoft® System Restore feature opens.

Follow the on-screen instructions. For additional information, see Microsoft® Windows® XP Media Center Edition 2005 online help or visit the Microsoft® web site.

Reinstall Applications or Drivers

The Reinstall Applications or Drivers option restores one or more factory-installed programs or software drivers to their original condition before any updates or modifications. This feature is best used when a single or small number of factory-installed programs are not performing normally.

For optional software programs that came with your computer, such as Microsoft® Office, use the CDs that came packaged with your computer, if reinstallation becomes necessary.

The Reinstall Applications or Drivers screen also provides a link, which takes you to Restore Windows Only, in case the issue you are experiencing is Windows based.

Before performing any restore or recovery options, go to the Sony online support Web site at **www.esupport.sony.com** and review your model-specific support page. Look for software driver updates, or check for knowledge base solutions that may help solve your computer's problems.

To access Reinstall Applications or Drivers

1. Start the VAIO Recovery program.
2. From the VAIO Recovery menu screen, click **Reinstall Applications or Drivers**.
3. Read the on-screen information, when complete click **Next**.

   Two tab pages appear on the next screen (Step 1 of 3). The active tab page, Applications, lists all software programs available for recovery. The Drivers tab page lists all software drivers available for recovery. The available options on each tab page reflect what applications and drivers were originally installed at the factory.

   Note: A text box located below the list box displays information about each available option when selected. To display this information, click the name of the option.

4. Click the **Applications** tab or **Drivers** tab, as desired.
5. Select the desired check box(es) for the applications and/or drivers you wish to restore.
6. Click **Next** to begin the recovery process.

   The next screen (Step 2 of 3) displays a time bar showing the progress of the application or driver recovery. During the recovery process, install screens of the individual software programs will appear as that program is installed.
7. When the installation is complete, click **Next**.

   The next screen (Step 3 of 3) informs you that selected program installations may not be finished. If a program installation window is still active, follow the directions to complete the recovery.

   If there are no active installation windows, click **Back** to recover additional applications or drivers, or if all recoveries are complete, click **Finish** to exit VAIO® Recovery.

   Note: After the recovery of any application or driver, you must restart your computer to update system and program files. Select Restart now to automatically restart your computer.

   This completes the VAIO Recovery option of Reinstall Applications or Drivers.

Restore C: Drive

The Restore C: Drive option restores the C: drive to its original factory condition. This includes all factory installed software. The time to complete the restore can take up to an hour depending on the amount of software being restored and the speed of your computer.

WARNING - Restore C: Drive deletes all personal files and settings, and any software installed on the C: drive after the computer was purchased.

The Restore C: Drive screen provides a link to Reinstall Applications or Drivers, which you can use for attempting to solve issues using a less invasive solution.

Note - The link to Reinstall Applications of Drivers, located on the Restore C: Drive screen, will only be available if you restart your computer from Windows.

Before performing any restore or recovery options, go to the Sony online support Web site at **www.esupport.sony.com** and review your model-specific support page. Look for software driver updates, or check for knowledge base solutions that may help solve your computer's problems.

To access Restore C: Drive

1. Start the VAIO® Recovery program. See Start VAIO Recovery on page 3.
2. From the VAIO® Recovery menu screen, click Restore C: Drive.
3. Read the on-screen information (Step 1 of 4), then select the **I understand** check box. The **Next** button will be unavailable until the check box is selected.
4. Click **Next**.

   If required, your computer restarts and displays the screen Restore C: Drive (Step 2 of 4). A time bar displays showing the progress of the first part of the C: drive recovery.

   Note - If you started your computer from the recovery discs, a message may display requesting that you insert additional recovery discs. When complete, you are asked to remove the disc and insert disc 1. **THIS COULD BE THE SAME DISC**. Click **OK**. The program continues and prepares to restart. A message displays asking you to remove the disc. Click **OK** to continue.

   The computer restarts and displays the Restore C: Drive (Step 3 of 4) screen.

   This screen displays the progress of the last part of restoring the C: Drive to its original factory configuration, and the individual install screens of each software program as it is installed.

5 When the restore completes, the screen Restore C: Drive

(Step 4 of 4) appears. Check for active program installation windows. Follow the on-screen instructions to complete the installation for that specific program. Continue until all active program windows are gone.

6 Click Finish to exit VAIO Recovery and restart your computer. When your computer restarts, you are guided through a series of screens for Windows set up. Follow the on-screen instructions.

This completes the VAIO Recovery option of Restore C: Drive.

Restore Complete System

The Restore Complete System option restores the entire main hard drive to its original factory configuration. The time to complete the restore can vary depending on the amount of software being restored and the speed of your computer.

WARNING - Restore Complete System deletes all personal files and settings, and any software installed after the purchase of the computer.

- This option is primarily for the following reasons:
- The main hard disk is replaced
- Change or modification of a RAID array configuration
- Restore the recovery drive partition on the main hard disk

The Restore Complete System main screen contains the following three links if you start your computer from Windows:

Note: If you restart your computer from the recovery discs or from using the F10 key, only the Go to Restore C: Drive link displays.

Go to Restore C: Drive - Restores only the C: drive to its original factory configuration. This provides you with a less invasive option than restoring your complete system.

Restart from disc - Starts the Restore Complete System process using the recovery discs.

Go to Create recovery discs - Allows you to create recovery discs if you have not done so previously, or have not purchased a set of recovery discs.

Note: A set of recovery discs are required to begin Restore Complete System.

Before performing any restore or recovery options, go to the Sony online support Web site at **www.esupport.sony.com** and review your model-specific support page.

To access Restore Complete System

1. Start the VAIO® Recovery program.
2. From the VAIO® Recovery menu screen, click **Restore Complete System**.

   The introductory screen for Restore Complete System appears. Read the on-screen information.
3. Click **Restart** from disc if you have the recovery discs available; if not, click **Create recovery discs** and return to this screen when complete.
4. Insert the first recovery disc in the optical drive slot and click **OK**.

   Your computer restarts and displays a screen with the following options:

   - Restore C: Drive
   - Restore Complete System
   - Reconfigure RAID
5. Click **Restore Complete System**.

   The screen Restore Complete System (Step 1 of 5) appears. Carefully read the information on the screen.

   This screen provides the link **Go to Restore C: Drive**, which allows you to try a less invasive alternative to solve a potential problem other than Restore Complete System.
6. Select the **Keep the Recovery Drive** [Recommended] check box, if desired.
7. Select the **I understand** check box. The **Next** button becomes available.
8. Click **Next**.

   Note: If you chose not to keep the current recovery drive, you will skip the Restore Complete System (Step 2 of 5) screen and move directly to the Restore Complete System (Step 3 of 5) screen. When the recovery process completes, remove the disc and click OK (Step 9).

   The recovery process starts and the screen Restore Complete System (Step 2 of 5) appears, which displays a time bar showing the progress of this step.

This step recreates your computer's recovery drive based on the original factory configuration. When finished, a VAIO Recovery message appears asking you to remove the disc.

Note: If additional recovery discs are required to complete this part of the recovery, a VAIO® Recovery message appears asking you to insert the next disc and click **OK** to continue.

9 Remove the disc and click **OK**.

The computer restarts and the Restore Complete System (Step 3 of 5) screen appears with the time bar in the same state as in the last screen. A VAIO® Recovery message may display asking you to insert recovery disc 1. (You may also be required to insert additional discs.)

10 INSERT THE SAME RECOVERY DISC AGAIN (from Step 9), and click **OK**. The recovery process automatically continues.

11 As the recovery process continues, you may be asked to insert additional discs depending on your choice of media. Insert the next disc and click **OK** to continue.

When this part of the recovery process completes, a VAIO® Recovery message may appear asking you to remove the disc and click **OK** to automatically restart the computer and resume the recovery process.

12 Click **OK**. This completes (Step 3 of 5). The computer restarts.

Note: If your computer previously started from the recovery discs, you may be asked to insert disc 1, click **OK**.

The screen Restore Complete System (Step 4 of 5) displays and automatically starts loading all original system and packaged software that was pre loaded at the factory.

Note: When you purchased your VAIO® computer, you may have received actual discs for software that was pre loaded on your computer, such as Microsoft® Office®. In this case, you will need to reload that software separately when the recovery is finished.

During this process, you can view some of the application install screens. No action should be required on your part. However, messages may display asking you to insert specific program discs to continue.

When the pre installed software has completed loading, the **Next** button becomes available.

13 Click **Next**.

The Restore Complete System (Step 5 of 5) screen appears. Respond to any active program installation windows that might still be open.

14 Remove any media in the optical drive slot and click **Finish** to exit VAIO Recovery and restart your computer.

When your computer restarts, you are guided through a series of screens for Windows set up.

15 Follow the onscreen instructions. When complete, your computer restarts.

This completes the VAIO® Recovery option of Restore Complete System.

VAIO Recovery: RAID Options

The following VAIO Recovery options are only available for the XL2A computer.

- Reconfigure RAID
- Intel Matrix Storage Console
- Delete a RAID Array

Reconfigure RAID

RAID (Redundant Array of Independent Disks) refers to the combining of two or more independent hard disks working in parallel to form a single logical array that stores data along with additional redundancy information.

Sony recommends using the Intel Matrix Storage Driver/Console to manage your RAID array.

To access the Intel Matrix Storage Console

1 Start the VAIO Recovery program. See the VAIO Recovery Guide, “Start VAIO Recovery.”

2 From the VAIO Recovery menu screen, click **Reconfigure RAID**. The introductory screen for Reconfigure RAID appears.

3 Click Go to Intel Matrix Storage Console.

One of the following three events occurs:

- VAIO Recovery detects the Intel® Matrix Storage Console program and automatically starts the program. Go to “Intel Matrix Storage Console” on the next page.
- VAIO Recovery detects Windows is not installed. A message displays telling you the process cannot continue and directs you to go to Restore

Complete System. When complete, the computer restarts and directs you through Windows set up.

Note: If you restart the computer using recovery discs, you may see windows for anti-spy ware and anti-virus programs. Close all program windows and click Cancel, if necessary to return to the Intel® Matrix Storage Console (Step 3).

- VAIO® Recovery does not detect the Intel® Matrix Storage Console program. A message displays asking if you want to install the program now? (Click **Yes** or **No**) Go to Step 4.

4. Click **Yes**. A message displays asking you to remove the disc.
5. Remove the disc and click **OK**. The computer restarts and displays a message to insert recovery disc 1.
6. Insert recovery disc 1 and click **OK**. The Applications or Drivers screen appears.
7. Verify that the Applications tab is the active tab page. Search the list for Intel Matrix Storage Console and select the associated check box.

   Note: If you need to install the RAID driver, click the Drivers tab and select **RAID Driver** from the list.

8. Click **Next**.

   VAIO® Recovery starts the installation of the selected applications and drivers. Install windows may appear that require action on your part to complete the installation. Follow the on-screen instructions.

   This completes the download instructions for the Intel Matrix Storage Console.

Intel® Matrix Storage Console.

The Intel® Matrix Storage Console provides RAID volume management within the Windows operating system and displays SATA device and RAID volume information. RAID volume management includes creating, deleting, and migrating RAID volume arrays.

You can access the Intel® Matrix Storage Console from VAIO® Recovery or from the Windows Start menu.

To access the Intel® Matrix Storage Console from VAIO® Recovery:

1. Start the VAIO® Recovery program.
2. From the VAIO® Recovery menu screen, click **Reconfigure RAID**.

   The introductory screen for Reconfigure RAID appears and contains the following three links:

   - **Go to Intel® Matrix Storage Console** - Use this link if you want to add or change a RAID array.
   - **Restart from disc** - Use this link if you want to delete or need to unlock a RAID array. This process requires that you restart the computer using recovery disc 1. If you do not have a set of recovery discs, click **Create Recovery Discs**.
   - **Create Recovery Discs** - Use this link to create a set of recovery discs.

3. Click **Go to Intel® Matrix Storage Console**. The Intel® Matrix Storage Console program starts.

Note: When your computer restarts, and if you are using recovery discs, you may see windows for anti-spy ware and anti-virus programs. Close all program windows and continue.

To access the Intel® Matrix Storage Console from the Windows Start menu:

- Click the Windows **Start** button, point to **All Programs**, **Intel® Matrix Storage Manager**, and then click **Intel® Matrix Storage Console** to start the program.

  Follow the screen instructions, or review the available help information from the program or from the Intel Web site.

Note: It is recommended to access the Intel® Matrix Storage Console from VAIO Recovery to take advantage of VAIO® PC automated features.

Delete a RAID Array

While working in the Intel® Matrix Storage Console, you may find it necessary to delete a RAID array when migrating to other RAID levels, or discover that certain RAID arrays and/or levels are no longer available. If the desired actions cannot be accomplished in the Intel® Matrix Storage Console, you must start VAIO ® Recovery, delete the RAID array, and perform Restore Complete System. Then you can return to the Intel Matrix Storage Console and reconfigure your RAID arrays.

WARNING - Restore Complete System deletes all personal files and settings, and any software installed after the purchase of the computer.

To delete or unlock a RAID array

1. Start the VAIO® Recovery program. See “Start VAIO® Recovery” in this appendix.
2. From the VAIO® Recovery menu screen, click **Reconfigure RAID**. The introductory screen for Reconfigure RAID appears.
3. Click **Restart from disc**. A message displays asking you to insert recovery disc 1.
4. Insert recovery disc 1 in the optical drive slot of the XL2A computer and click **OK**. The computer restarts and displays a page with the following VAIO Recovery options:
   - Restore C: Drive
   - Restore Complete System
   - Reconfigure RAID
5. Click **Reconfigure RAID**. A Reconfigure RAID page displays. Read the information.
6. Click **Next**.

   Note: If for any reason a RAID array cannot be deleted, a message displays stating “No RAID Array Detected.” Click **OK** to close the message and then click **Back** to return to the previous screen.

   The Reconfigure RAID (Step 1 of 1) screen displays. Read the information on the screen including the **WARNING** statement.
7. Select the **I understand** check box and click **Next**.

The VAIO Recovery program automatically deletes all RAID arrays on the hard disk drive. When complete, a message displays with instructions on completing the process.

8 Leave the disc in the optical drive and click **OK**. The computer restarts and displays a screen with the following options:

- Restore C: Drive
- Restore Complete System
- Reconfigure RAID

9 Click **Restore Complete System** to restore all original factory-installed software. See Restore Complete System, page 11 for step-by-step instructions to perform this procedure.

10 When complete, start the Intel Matrix Storage Console and configure your RAID array(s), as desired.

See **Intel Matrix Storage Console**, for additional information.

Support Resources

Documentation

VAIO® Computer User Guide

The online User Guide provides information about configuring, maintaining, and upgrading your computer. This resource offers a variety of topics allowing you to quickly view topic-specific information.

VAIO® Recovery/ RAID Guide

The VAIO Recovery Guide provides information about the VAIO Recovery program, which includes six tools to help you manage your computer. The RAID Guide provides information about configuring and managing RAID arrays for RAID-Ready VAIO computers.

To access the online documentation

1 Click **Start** in the Windows taskbar, then click **All Programs**.

2 From the Programs menu, click **VAIO Support Central**.

3 Select **Documentation**. Select the desired documentation.

Online Support

VAIO Support Central - VAIO Support Central provides a single location for information and assistance for your Sony product.

To access VAIO Support Central

1. From the Windows taskbar, click Start.
2. From the Start menu, click All Programs.
3. From the All Programs menu, click VAIO Support Central.

Intel® Web site

The Intel® Internet site provides a detailed overview of RAID, a description of RAID levels, and how to determine which RAID level is best for you. The site also contains links to detailed design and configuration documents and articles covering all required information to set up a RAID system. A brief tutorial is available for viewing, which demonstrates the features of various RAID levels.

www.intel.com

For additional RAID information, go to the Intel Internet site and search for “RAID Primer.” From the search results page, click the link titled Intel RAID Controllers - RAID Primer - What is RAID?

Summary

This chapter explained the features of the VAIO® HDD Recovery program. In addition, detailed information and procedures were provided for how to use the six VAIO® Recovery Tools.

Appendix E:
RAID Configuration

Overview

RAID (Redundant Array of Independent Disks) refers to the combining of two or more independent hard disks working in parallel to form a single logical array that stores data along with additional redundancy information.

About This Guide

This guide provides an overview of RAID arrays and the various RAID levels that can be configured with your Sony® VAIO® computer. It lists detailed procedures for using the RAID Wizard to configure the hard disc drives, change you computer's RAID array, or to remove the RAID configuration. Additional procedures are also provided for using the VAIO® Recovery Wizard and the Intel® Storage Utility programs. The list of topics in this guide include:

- Why use RAID?
- Benefits of RAID
- RAID Levels
- Choose a RAID Configuration
- Before you begin
- RAID Configuration Wizard
- VAIO® Recovery Wizard
- Intel® Storage Utility
- Frequently Asked Questions
- Trouble Shooting
- RAID Glossary
- Support Resources

Important Note About This Guide

Note: This guide contains information common to all VAIO models that can be configured for RAID. For detailed information about your specific computer, go to VAIO Support Central and select Product Specification, or contact VAIO Customer Service.

Why Use RAID?

The main objectives of RAID are to improve data availability and security. With everything from basic file and print services to e-Commerce and important business applications running on server-based networks, reliable and secure access to data is becoming a critical issue for everyone.

A RAID system can improve your VAIO® computer's performance by improving data availability and security. RAID prevents downtime in the event of a hard disk failure by storing your data on multiple hard disks.

Note: Your VAIO® computer's drive bay can accommodate a total of three S-ATA hard disk drives. Sony recommends using hard disk drives that are identical in size and manufacture.

Benefits of RAID

The degree that you realize the various benefits listed below depends on the exact type or level of RAID that you choose. However, you will always get some combination of the following benefits

Higher Data Security

Most RAID levels provide protection for the data stored on the array through the use of redundancy. This means that the data on the array can withstand the failure of one hard disk (or sometimes more) without any data loss, and without requiring any data to be restored from backup.

Fault Tolerance

RAID implementations that include redundancy provide you with a more reliable overall storage system than can be achieved by a single disk. This means there is a lower chance of the storage system (as a whole) failing due to hardware failures.

Improved Availability

Availability refers to your data being present and ready to use. A RAID system improves availability by providing fault tolerance and by providing special features that allow for recovery from hardware faults without disruption.

Increased and Integrated Capacity

RAID systems increase capacity by turning a number of smaller drives into a larger array, thus combining or adding their individual storage capacities together. This facilitates applications that require large amounts of contiguous disk space, and also makes disk space management simpler. (However, a percentage of total capacity is lost to overhead or redundancy in most implementations.)

Improved Performance

RAID systems improve performance by allowing the controller to take full advantage of the capabilities of multiple hard disk to get around performance-limiting issues that plague individual hard disks. Different RAID implementations improve performance in different ways and to different degrees, but all improve performance in some way.

RAID Levels (Types)

Currently, Sony supports four different levels or types of RAID to implement an array, using combinations of mirroring, striping, duplexing, and parity technologies.

Each RAID level is independent and different, and no strict hierarchy should be inferred from the specific number attached to a RAID level. In other words, a RAID level that is “better” for one person may be “worse” for another.

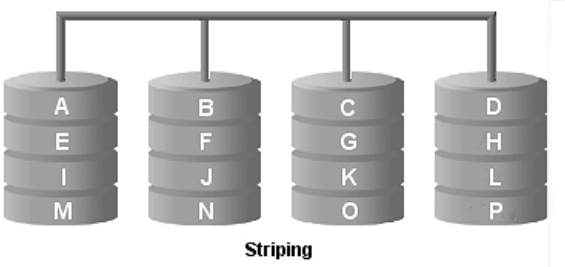
Note: The software to perform the RAID-functionality and control the hard disks can simply be a driver, or can be located on a separate hardware RAID controller. Some Microsoft® operating systems include a software RAID solution for a lower cost option. Hardware RAID controllers cost more than pure software, but can offer better performance.

What are the different RAID Levels?

A RAID array is made up of two or more hard disks working in parallel, which appear and function as a single hard disk to the user. Sony has approved four different RAID levels or types for use in VAIO® computers.

RAID 0 - Striping

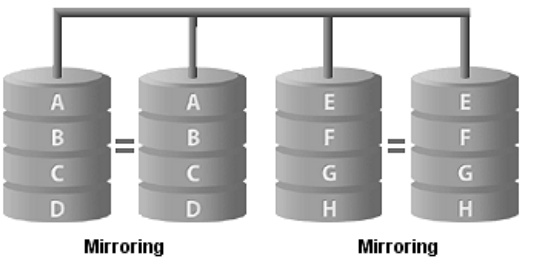
A performance-oriented data mapping technique. Data are divided into strips and written across all the disks of the array. This level allows for high read/ write performance for a relatively low cost.



RAID 0 is not fault-tolerant. Redundant information is not stored. Failure of any disk in the array results in the loss of all data.

RAID 1 - Mirroring

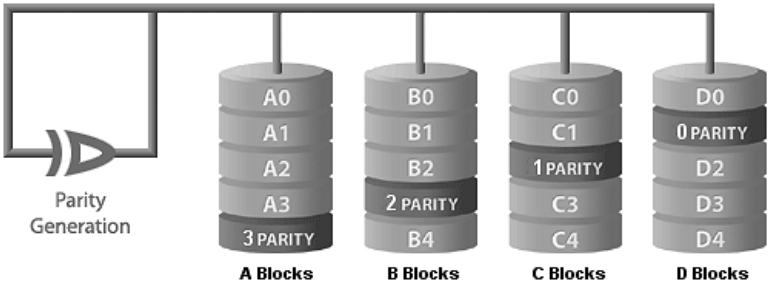
This level operates with two disks that use parallel access for high data-transfer rates. Level 1 provides excellent data reliability and improves performance for read-intensive applications, but at a relatively high cost.



RAID 1 provides redundancy by writing identical data to all disks in the array. If either disk fails, the controller uses the data drive or the mirror drive for data recovery and continues to operate. Data can then be copied to the replacement disk.

RAID 5 - Distributed Parity

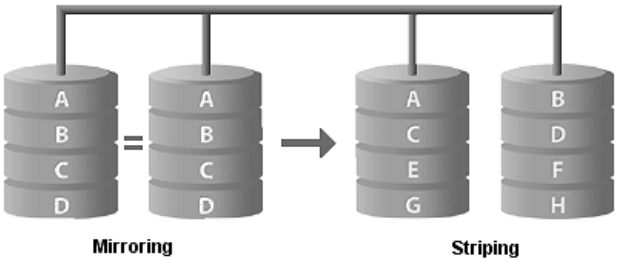
RAID 5 is the most common secure RAID level. In this level, data chunks are larger, and data are transferred to disks by independent read and write operations (not in parallel). Parity information is spread across all drives.



Raid 5 can withstand a disk failure without losing data or access to data. The failed disk is removed and the data can then be copied to the replacement disk. RAID 5 can be achieved with software, however a controller is recommended.

RAID 10 - Striping and Mirroring

RAID 10 combines the features of levels RAID 0 and RAID 1 in a single system. This allows for faster data access (like RAID 0) and single-disk fault tolerance (like RAID 1). RAID 10 requires twice the number of disks, but offers performance improvements by striping the data across an array, and then mirroring the striped array on a second set of disks.



RAID 10 provides data security by mirroring all data on a secondary set of disks. This duplication eliminates the overhead and delay of parity. Fifty percent of capacity is lost to redundancy.

Note: The XL2A computer does not support this level of RAID.

Which RAID level should I use?

The right choice of RAID level depends on the application for which it is used. The chart below illustrates possible applications for each level of RAID supported by Sony.

Level	No. of Drives	Application requires:
0	2 - 3	High speed storage, but not redundancy.
1	2 - 3	Redundancy with fast write options. Entry-level systems where only two hard disc drives are required.
5	3	Good performance for Reads, slower for Writes (requires parity data be updated each time. May provide higher performance if I\O is random and in smaller chunks).

What are the characteristics of each level?

Level	Plus	Minus	How Used
0	Great I/O performance; all storage capacity can be used; easy to implement.	Not fault tolerant; if one drive fails, all data is lost.	Video Production Image Editing Pre Press
1	Redundancy of data - 100%; no data rebuild required in disk failure.	High disk overhead; may not support hot swap of failed disk.	Accounting Payroll App's requiring high availability of data.
5	High Read data transfer rate; Low ratio of parity disc = high efficiency.	Complex controller design; difficult to rebuild in case of disc failure.	Various servers; most versatile RAID level.

Configure a RAID Array

Certain VAIO® computers can be ordered for purchase already configured for RAID 0, RAID 1, RAID 5, or RAID 10. The number of pre installed SATA disk drives vary depending on the RAID level purchased. See your computer's specification sheet for details about your specific hardware configuration.

Note: When installing additional disk drives, make sure that you use identical S-ATA drives, when possible. If you install drives that vary in size, storage capacity will be limited to the size of the smallest drive.

Before You Begin

To configure your RAID array, perform the following steps

1. Back up your computer's data to external media. Creating, altering, or configuring for RAID deletes all data from the targeted hard disk drives.
2. Create the VAIO® Recovery Discs media. The discs are required to recover your data files after you configure the RAID volumes to perform a hard disk recovery.

   For additional information about creating recovery discs, see the VAIO® Recovery Guide located in VAIO® Support Central.

To access the online documentation

1. Using the wireless keyboard, click **Start** in the Windows® taskbar, then click **All Programs** > **VAIO® Support Central**.
2. From the VAIO® Support Central page, select **VAIO® Documentation**, and then select the desired document from the list.

Install Additional Hard Disc Drives

If you purchased a RAID Ready computer, you may be required to install additional hard disks to configure the RAID array to the desired level. In addition to the procedure here, you can locate additional procedures for installing hard disks in the section titled "About Hard Disk Drive Installation" of the VAIO® Computer User's Guide.

To install additional hard disk drives

1. Place all S-ATA disk drives into the drive holder inside the computer's chassis.
2. Connect one end of the S-ATA data cable(s) to the S-ATA connection, starting with Port-0 on the motherboard. Connect the data cables of any additional disks to Ports 1 and 2.

3 Connect the other end of the S-ATA data cable to the corresponding S-ATA disk drive.

4 Connect the S-ATA power cable to the corresponding S-ATA disk drive.

If your disk drive is equipped with two power connectors, connect the S-ATA power cable. Refer to the documentation supplied with your disk drive for details on proper power connections.

When all disk drives are installed, you are ready to configure the RAID array.

Which tool do I use?

There are multiple tools and methods for configuring a RAID hard disk array. Sony recommends the use of the Intel® Matrix Storage Console.

Intel® Matrix Storage Console.

The Intel® Matrix Storage Console provides RAID volume management within the Windows® operating system and displays SATA device and RAID volume information. RAID volume management includes creating, deleting, and migrating RAID volume arrays.

You can access the Intel® Matrix Storage Console from VAIO® Recovery or from the Windows® Start menu.

To access the Intel® Matrix Storage Console from VAIO Recovery:

1 Start the VAIO® Recovery program. For additional information, See the VAIO® Recovery Guide located in VAIO® Support Central.

2 From the VAIO® Recovery menu screen, click **Reconfigure RAID**.

The introductory screen for Reconfigure RAID appears and contains the following three links:

- Go to Intel® Matrix Storage Console - Use this link if you want to add or change a RAID array.
- Restart from disc - Use this link if you want to delete or need to unlock a RAID array. This process requires that you restart the computer using recovery disc 1. If you do not have a set of recovery discs, click Create Recovery Discs.
- Create Recovery Discs - Use this link to create a set of recovery discs.

3 Click **Go to Intel® Matrix Storage Console**. The Intel® Matrix Storage Console program starts.

Note: When your computer restarts, and if you are using recovery discs, you may see windows for anti-spy ware and anti-virus programs. Close all program windows and continue.

To access the Intel® Matrix Storage Console from the Windows® Start menu:

- Click the Windows® **Start** button, point to **All Programs**, and then click **Intel® Matrix Storage Console** to start the program.

  Follow the screen instructions, or review the available help information from the program or from the Intel® Web site.

Note: It is recommended to access the Intel® Matrix Storage Console from VAIO® Recovery to take advantage of VAIO® PC's automated features.

Delete a RAID Array

While working in the Intel® Matrix Storage Console, you may find it necessary to delete a RAID array when migrating to other RAID levels, or discover that certain RAID arrays and/or levels are no longer available.

If the desired actions cannot be accomplished in the Intel® Matrix Storage Console, you must start VAIO® Recovery, delete the RAID array, and perform Restore Complete System. Then you can return to the Intel® Matrix Storage Console and reconfigure your RAID arrays.

WARNING - Restore Complete System deletes all personal files and settings, and any software installed after the purchase of the computer.

To delete or unlock a RAID array

1 Start the VAIO Recovery program.

2 From the VAIO® Recovery menu screen, click **Reconfigure RAID**.

The introductory screen for Reconfigure RAID appears.

3 Click **Restart from dics**.

The optical drive door opens and a message displays asking you to insert recovery disc 1.

4 Insert recovery disc 1 and click **OK**.

The computer restarts and displays a page with the following VAIO® Recovery options:

- Restore C: Drive
- Restore Complete System
- Reconfigure RAID

5 Click **Reconfigure RAID**.

A Reconfigure RAID page displays. Read the information.

6 Click **Next**.

Note: If for any reason a RAID array cannot be deleted, a message displays stating “No RAID Array Detected.” Click **OK** to close the message and then click **Back** to return to the previous screen.

The Reconfigure RAID (Step 1 of 1) screen displays. Read the information on the screen including the WARNING statement.

7 Select the **I understand** check box and click **Next**.

The VAIO® Recovery program automatically deletes all RAID arrays on the hard disk drive. When complete, a message displays with instructions on completing the process.

8 Leave the disc in the optical drive and click **OK**.

The computer restarts and displays a screen with the following options:

- Restore C: Drive
- Restore Complete System
- Reconfigure RAID

9 Click Restore Complete System to restore all original factory-installed software.

See Restore Complete System for step-by-step instructions to perform this procedure.

10 When complete, start the Intel® Matrix Storage Console and configure your RAID array(s), as desired.

11 See Intel® Matrix Storage Console, for additional informaiton.

RAID Glossary

This glossary contains some basic term that may enhance your understanding of RAID technology.

RAID Glossary

Term	Definition
RAID Array	A collection of drives which collectively act as a single storage system, which can tolerate the failure of a drive without losing data, and which operate independently of each other.
Fault tolerance	The ability of a computer to continue its junction, even after one or more hard disk drives have failed.
Intel® Application Accelerator	Software program that replaces the original ATA drivers provided with the Microsoft® Windows® operating system.
Mirrored/ Mirroring	Provides redundancy by writing identical data to each member disk of the array.
Parity	A type of data protection where redundant information is calculated from actual data values.
Physical Drive	The actual hard disk drive.
RAID	Redundant array of independent disks.
Redundant Information Technology	Additional computer components, such as hard disk drives that are installed to back up the primary storage disks in case of failure.
S-ATA	Serial Advanced Technology Attachment. Standard used for serial signaling technology and is used for connecting hard disk drives.
Striped/Striping	A performance-oriented data mapping technique. Data written to the array are divided into stripes and written across the disks of the array.

Support Resources

Documentation

VAIO® Computer User Guide

The online User Guide provides information about configuring, maintaining, and upgrading your computer. This resource offers a variety of topics allowing you to quickly view topic-specific information.

VAIO® Recovery/ RAID Guide

The VAIO® Recovery Guide provides information about the VAIO® Recovery program, which includes six tools to help you manage your computer. The RAID Guide provides information about configuring and managing RAID arrays for RAID-Ready VAIO® computers.

To access the online documentation

1. Using the wireless keyboard, click **Start** in the Windows® taskbar, then click **All Programs** > **VAIO® Support Central**.
2. From the VAIO® Support Central page, select **VAIO® Documentation**, and then select the desired document from the list.

Internet Information

VAIO Support Central - VAIO Support Central provides a single location for information and assistance for your Sony product.

To access VAIO Support Central

1. From the Windows taskbar, click Start.
2. From the Start menu, click All Programs.
3. From the All Programs menu, click VAIO Support Central.

Intel® Web site

The Intel® Internet site provides a detailed overview of RAID, a description of RAID levels, and how to determine which RAID level is best for you. The site also contains links to detailed design and configuration documents and articles covering all required information to set up a RAID system. A brief tutorial is available for viewing, which demonstrates the features of various RAID levels.

www.intel.com

For additional RAID information, go to the Intel Internet site and search for "**RAID Primer**." From the search results page, click the link titled **Intel® RAID Controllers - RAID Primer - What is RAID?**

Summary

This guide explained the different configurations and features using a RAID hard disk drive configuration. In addition, detailed information is provided for the Intel® Matrix Storage Console.

Appendix F:
Troubleshooting

This section provides you with answers and additional information to questions and issues that may arise during the set up and operation of the VAIO® VGX-XL2A Digital Living System™. If the answers to your questions are not contained in this appendix, go to VAIO Control Central for additional help.

The Troubleshooting appendix is divided into the following sections:

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Power/Start

Event:

Power is not on and green power lamp is not lit.

Comment:

Confirm that the XL2A computer’s power cord is inserted firmly into an outlet.

- Confirm that all of the cables are connected well.
- Remove all the cables connected to this device, and connect them again after waiting five minutes, then turn the power on again.
- If the device does not run after doing the above, please contact VAIO Customer Support.

Event:

The power is turned on and the power lamp (green) of theXL2A computer is on, but there is no display on the screen.

Comment:

- Make sure the proper input for the display unit (TV, DVI-D monitor) is selected.
- Please confirm that the display unit (TV, DVI-D monitor) power is turned on.

If nothing is displayed on the screen after a time, please follow the procedures below.

- Make sure the XL2A computer is connected to the proper input.
- Hold the power button of this device for at least six seconds, make sure the power lamp turns off and then turn the power on again.
- If nothing is displayed after the above operation, hold the power button of this device again for at least six seconds, make sure that the power lamp turns off, then remove all cables connected to this device, and re-connect after waiting five minutes and then turn the power on again.

Event:

Unable to shutdown the XL2A computer.

Comment:

Methods vary depending on the conditions when the power will not turn off. Confirm the following and follow the procedures below.

- Quit all software you are using, then try to turn off the power again.
- If peripheral devices such as printers or USB devices, etc. are connected, or if a network is used, make sure that they are not connected and then turn off the power.

  When Windows is communicating with a peripheral device or network, the power can't be turned off.
- Confirm any newly installed software, data, and its operation, etc.
- The **Turn Off Computer** in the **Start** menu is selected and the Turn Off Computer does not display. Hold down the Alt key and press F4. When the Turn Off Computer screen displays, click **Turn Off**.
- When the screen freezes or doesn't move, hold down the Ctl and Alt keys and press **Delete**. Once the "Windows Task Manager" screen displays, click **Turn Off** from the Shut Down menu.
- When "Saving the settings" or "Shutting down Windows" displays and does not change, follow these steps.

  - Press **Enter**. If the power still will not turn off, hold the power button of this device for at least six seconds and make sure the power lamp turns off.

Event:

When the power is turned on a message is displayed and Windows does not load.

Comment:

- Remove any third-party USB devices including floppy drives and printers.
- When "Bad CMOS Checksum" is displayed, the battery needs to be replaced due to the draining of the battery in this device.

  Please contact the VAIO Customer Support for replacing the battery.
- When "CMOS Checksum Error" is displayed, the BIOS configuration contents may be damaged.

To return the BIOS to the original configuration, perform the following steps.

1. Press the power button, and when the "VAIO" logo is displayed on the screen, press the F2 key on the keyboard. The BIOS setup menu runs and the "BIOS SETUP UTILITY" screen is displayed.
2. Press the F5 key. The message "Load Setup Defaults" displays.
3. Press the Left Arrow or Right Arrow key and select **OK**, then press the **Enter** key. All the configuration items return to the original configuration.
4. Press the F10 key (Save and Exit). The message "Save configuration changes and exit now?" is displayed.
5. Press the Left Arrow or Right Arrow key and select **OK**, then press the **Enter** key. The changed configuration is saved, the BIOS setup menu ends and Windows XP starts.

Event:

A message with "Insert the disk with the Windows XP CD-ROM label and click on **OK**." displays.

Comment:

This message may be displayed when the configuration of this device has changed. Follow the procedures below. Do not insert the recovery disk into the drive.

1. Click **OK** after the message displays. The Copy Files screen displays.
2. Enter **C:\WINDOWS\I386** in the "Source to copy files from" and click **OK**. The necessary files are copied.

Event:

Windows doesn't start after installing the upgraded drivers.

Comment:

Run in Safe mode by following the following steps and re-install the driver.

1. Press the power button of this device, and when the VAIO logo is displayed on the screen press the F8 key on the keyboard.
2. When "Windows extended options menu" displays, press the Page Up key or the Page Down key, select **Safe mode** and press the **Enter** key.
3. When Windows runs, click the **Start** button. Then select **Control Panel > Performance and Maintenance > System**. From the Systems Properties screen, click the **Hardware** tab and click **Device Manager**.
4. Select the installed device or the updated device in the Device Manger screen. Display the properties screen by clicking Properties in the list, which displays by right clicking. Then click the **Driver** tab.
5. Click **Roll Back Driver** and install the driver that was running normally.
6. Restart this device with a normal restart.

Event:

Windows does not start (Note: RAID requires two or more hard drives.)

Comment:

When a RAID volume and a drive not configured as a RAID volume are mixed in the system, Windows may not run. For this case, change the Boot Volume settings according to the procedure below.

1. Press the power button of this device and when the "VAIO" logo is displayed on the screen, press the F2 key on the keyboard.

   The BIOS setup menu runs and the the main menu screen is displayed. **Note**: The BIOS setup menu may not run immediately after pressing the F2 key depending on the condition of this device.
2. Select the setting **1st Drive** of the volume on the drive with the newest port number in **Hard Disk Drives** in the Boot menu.

Event:
Windows operation becomes unstable.

Comment:
Quit the software you are using and restart the XL2A computer.

If this device doesn't restart, turn the power off by holding the power button of this device for at least four seconds. The power lamp turns off when the power is off. If the power lamp does not turn off and blinks in orange (standby mode), try to turn off the power again by holding the power button for at least four seconds. However, the file you are creating or editing may not be usable if you turn off the power using this method.

Event:
How do I know if the battery level of the keyboard is sufficient.

Comment:
The level of the batteries in the keyboard can be checked using the battery indicator located on the upper right of the keyboard.

Note: Please turn off the power to the keyboard when you replace the batteries for the keyboard.

Event:
The unit will not stay in hibernation or standby mode.

Comment:
When using the wireless LAN of this device as an access point and the WOW (Wake on Wireless LAN) function is enabled, it may return from Standby mode or Hibernation as a result of a wireless packet from the XL2A computer if there is a wireless device near you.

Disable the WOW (Wake on Wireless LAN) function or the wireless function of supported device.

Password

Event:

Unable to log on to Microsoft® Windows® XP operating system.

Comment:

- The password is case-sensitive. Confirm the password and re-enter.
- If there is an account that was created by a user with administrative privileges, change the password from a "Computer Administrator" account other than that of the user who forgot the password.
- If there is not a user with administrative privileges, and if no password is set for "Administrator (username)", you can change the user password by starting Windows in Safe mode and logging on as "Administrator (username)".

Screen/Display

Event:

My display distorts for a few seconds while system starts up, or resumes from standby/hibernation.

Comment:

This is normal. The display may distort for a few seconds while system starts up, restarts, resumes from standby/hibernation when connected to a TV.

Event:

My MCE screen flickers sometimes.

Comment:

The MCE screen will flicker when it's in a windowed screen and a balloon pops up in the taskbar. You can close the pop-up balloon in the task bar or maximize the MCE screen.

Event:
Colors on the screen are not displayed clearly,

Comment:

- Turn off the power, and then restart the XL2A computer.
- Check the other inputs on your display to make sure the display is working properly.

Event:
The screen is frozen

Comment:

- Verify the keyboard is turned on, the battery level is sufficient, and the keyboard is connected to the PC (antenna icon on the keyboard display).

Restart this device according to the following procedure.

1. Hold down the Ctrl key and the Alt key and press **Delete**. The Windows Task Manager screen displays.
2. Select the software application that displays as "Not responding" in the "Windows Task Manager" screen, and click **End Task**.
3. Click **Turn Off** from the Shut Down menu. After the power to the XL2A computer has been off approximately 30 seconds, turn the power on again.

Note:If this device does not restart by following the above procedures, turn off the power by holding the power button of this device for more than 6 seconds. The power lamp turns off when the power is off. When the power lamp is on (orange), turn off the power again by holding the power button for at least four seconds. Files you are creating or editing may not be usable using this method to turn off the power to the XL2A computer.

Event:
The screen is dark

Comment:

- Adjust the brightness of TV. Adjusting the brightness will vary depending on the type of TV. For details, please refer to the TV users manual.
- Verify if other inputs on the TV are dark, if they are please refer to the TV user manual

Event:
Pictures on the TV screen are distorted

Comment:

- Confirm that this device and the display device are properly connected.
- When the TV is connected using a Digital video cable, make sure to use an output format that matches the Digital terminal of the TV you are using.
- When the TV is connected using a component cable, make sure to use a resolution that matches the component input of the TV you are using.

Event:
Part of the top, bottom, left or right of the screen is not displayed when the TV is displayed.

Comment:
Adjust the over scan width using the over scan adjustment on the nVideo graphic card's Properties dialog box. For additional information, see the nVideo user guide.

Event:
Part of the top, bottom, left or right of the screen is not displayed and is black.

Comment:
Adjust the over scan width using the over scan adjustment on the nVideo graphic card's Properties dialog box. For additional information, see the nVideo user guide.

Event:

When the TV or display is connected to the HDMI OUT (HDMI output) connector, the image does not display.

Comment:

- Re-connect the HDMI™ cable.
- It may be connected to a device that does not support HDCP.

  Connect to a device which supports HDCP.
- When a HDMI-DVI adapter is used, the TV or display may not be supported by the HDMI-DVI adapter.

  Connect a TV or display which supports the HDMI-DVI adapter.

Wireless Keyboard/Touchpad Issues

Event:

My keyboard stops working after a period of time.

Comment:

The keyboard/touchpad will sleep when it is not in use. You must press any key on the keyboard to resume the connection.

Event:

My keyboard works, but not the touchpad (or vice versa).

Comment:

1. Verify that the keyboard switch is on and that the pointing device switch on the back of the keyboard is on.
2. Re-connect the keyboard/touchpad to the XL2A computer by pressing the Connect buttons (on the back of the keyboard and the front panel of VGX-XL2A) at the same time and hold for a few seconds.

Event:

Don't know how to enter text using the VAIO® Remote Control.

Comment:

Refer to the VGX-XL2A Digital Living System™ Entertainment Guide.

Event:

Cannot enter text when I press the keys on the keyboard.

Comment:

Make sure that the "Num Lock" indicator on the upper right keyboard is not displayed.

Event:

Cannot use the keyboard

Comment:

Reponse methods vary depending on the reason the keyboard is not able to be used. Confirm the following and follow the procedures below.

Usage environment

The distance between this machine and the keyboard must be within about 10m. If metal is near the keyboard, communication card may be affected.

The keyboard operates at 2.4 GHz. If a wireless device which uses the same 2.4 GHz, such as a wireless LAN, is used nearby, it may not operate properly.

Power ON

Make sure the Power switch on the keyboard is turned on. When you are not using the keyboard, turn off the power to perserve the batteries.

Event:

Check whether keys such as Caps Lock and NumLk are enabled.

Comment:

You can check with the various indicators on the upper right of the keyboard.

Event:
Cannot use the pointing device.

Comment:
Make sure your pointing device is not disabled.

Refer to the Setting up the Keyboard topic in Chapter 1 of this guide.

Event:
I want to disable the pointing device.

Comment:
Turn the Pointing Device Switch on the back side of the keyboard to "OFF".

Event:
The “pointer” on the screen does not move.

Comment:
Follow the instructions below.

1. Turn off the power to the XL2A computer and the keyboard.
2. Restart the XL2A computer and the keyboard.
3. Perform the Activate Keyboard Communications procedure in Chapter 1, if necesary.

Optical Drive

Event:
Cannot use 8cm discs in my XL2A computer’s optical drive.

Comment:
The drive only accepts 12cm discs.

Event:
Cannot use 8cm disc with the 8cm disc adapter.

Comment:
The 8cm disc adapter (included) can be used to insert 8cm discs but the disc can only be read and not written to.

Event:
The eject button of my XL2A computer's optical drive does not work.

Comment:
The eject button will not work if the drive letter of the XL2A optical drive is after the drive letter of the XL1B optical drive (ie: XL1B = D:\ and XL2A = E:\).

If this issue occurs, please run the program located at C:\Program Files\Sony\MakeIDE\MakeIDEFirstDrive.exe. This will change the VGX-XL2 optical drive letter to be before the VGP-XL1B changer drive letter.

Hard Disk

Event:
An error occurred in the initialization of the hard disk.

Comment:

- The files on the hard disk cannot be recovered. This device must be recovered by using the recovery function in the hard disk or your own recovery disk.

Event:
Cannot start-up from the hard disk.

Comment:
Please remove any media from the memory card reader and disconnect all third-party devices such as scanners, printers, floppy drivers, etc. and try again.

- If the hard disk does not start-up with above process, you may need to perform hard disk drive recovery. Go to VAIO® Support Central. (Click Start from the Windows® taskbar and select All Programs > VAIO® Support Central.

Event:
Available hard disk space is low.

Comment:
Clean up the disk.

Temporary files and backup files are automatically created to make Windows' processes faster, so the free space on the hard disk is decreased. If you clean up the disk, the temporary files, etc. are deleted and the free space is increased.

Clean up the disk according to the following procedure.

1. Click **Start** on the Windows taskbar and select **All Programs >Accessories > System Tools** and click **Disk Clean Up**. The "Select Drive" screen displays.
2. Select **Local disk (C:)** or **Local disk (D:)** and click on **OK**.
3. Read the description of the files carefully, and check the files to delete.
4. Click **OK**. The message "Are you sure you want to perform these actions?" displays.

   Click **Yes**. Disk clean up proceeds.

Software Limitations

Event:
My software application does not launch.

Comment:
Some software applications require a minimum resolution higher than your current resolution setting. Please check back to our support website at http://www.sony.com/pcsupport/ for software update.

Event:
Some of my shortcuts in the start menu are not visible.

Comment:
At 480i/480p resolution, the Start Menu gets cut off and some of the shortcuts are not visible. You can switch the Start Menu to Classic Start Menu will help alleviate this but not complete resolve the issue.

MCE Starting Up

Event:
MCE appears to be unresponsive after boot up.

Comment:
Even though MCE is launched, there are still other programs in the background that have not finished loading as well as other MCE processes that need to load as well.

DVD Playback Limitations

Event:

What resolution does my DVD playback?

Comment:

- For HDMI™ or DVI connection - DVD playback works in all resolutions (480p/720p). Note: Output of 1080i resolutions are not supported.
- Component Video connection DVD playback ONLY works in 480i/480p resolutions.
- You cannot view copy-protected DVD through component video connection with a higher resolution than 480i/480p due to High-bandwidth Digital Content Protection (HDCP).

MCE Live TV Issues

Event:

Can the XL2A computer support High Definition broadcast stations?

Comment:

The VGX-XL2A TV supports HD broadcast stayions via OTA ATSC content.

Sound Issues

Event:

The sound volume control does not work (except from the headphone jack output) from my XL2A computer.

Comment:

Microsoft® Windows® Media Center Edition 2005 cannot control the volume level of HDMI, Optical/Coaxial S/PDIF, and Line Out sound. Windows/MCE will only control the volume of the headphone jack output.

Event:
The sound coming from HDMI™ or S/PDIF does not work.

Comment:
Check the Sound Reality Control Panel.

- Go to the Windows Control Panel, and then from the Category view, select Sounds, Speech and Audio Devices > Sound Reality Audio.

  Make sure the appropriate boxes (HDMI or S/PDIF) are checked. (Go to Chapter 2: Setting Up the DSL System. Step 3: Connecting Your Home Theatre/Speakers.

Wireless LAN

Event:
Cannot use the wireless LAN.

Comment:
Make sure that the wireless LAN function set up correctly and is turned on. Refer to the Appendix A: Wireless Local AreaNetwork in this guide.

Make sure that the Wireless Zero Configuration service is started. Operate according to the following procedure.

1. Click **Start** on the Windows taskbar and click **Control Panel**. The Control Panel screen displays.
2. From the Category view, click **Performance and Maintenance**.
3. Click **Administrative Tools**.
4. Double-click the **Services** icon.
5. Check the Wireless Zero Configuration item. The Wireless Zero Configuration service has started if the condition is **Start** and type of startup is **Automatic**.

   Start the Wireless Zero Configuration service with the following steps if the service has not started.

1. Right click **Wireless Zero Configuration and click Properties**. The Properties of Wireless Zero Configuration screen displays.
2. Set the type of start-up as Automatic and click **Apply**.
3. Click **Start** in service condition.

4 Click **OK** and close the screen.

Event:

This device can't communicate with the wireless LAN access point (can't access the Internet)

Comment

- Check the items in "Can't use the wireless LAN" above.
- Make sure that the power is turned on to the wireless LAN access point.
- Check the settings for the wireless LAN access point.

  Refer to the Appendix A: Wireless Local AreaNetwork in this guide.
- Check if this device and the wireless LAN access point are connected.

  Refer to the Appendix A: Wireless Local AreaNetwork in this guide.
- The communication distance between the devices varies depending on the actual distance between the communication devices, the surrounding environment such as obstacles, the equipment configuration, the radio wave condition, the presence of walls, materials, and software used, etc.

  Move the location of this device or the wireless LAN antenna for this device, or bring both communication devices closer together.

Check if the wireless LAN access point displays in the "Choose a wireless network" list on the "Wireless Network Connection" screen.

1 Click **Start** on the Windows taskbar and then click **Control Panel**. The Control Panel screen displays.

2 From the Category view, click **Network and Internet Connections**.

3 Click **Network Connections**. The Network Connections screen displays.

4 Right click **Wireless Network Connections** and click **Display Wireless Network to use**. The Wireless Network Connection screen displays.

5 Check if the wireless LAN access point displays in the Choose a Wireless Network screen.

The network key entered may be wrong. Once the network key is set it is displayed with "*" for security purposes and you can't read it. Re-enter the security key. Follow the procedure.

1 Click **Start** on the Windows taskbar and then click **Control Panel**. The Control Panel screen displays.

2 From the Category view, click **Network and Internet Connections** and then **Network Connections**. The Network Connections screen displays.

3 Right click Wireless Network Connections and click **Properties**.

4 Click the **Wireless Networks** tab.

5 Select the item you want to confirm from the Preferred Networks list and click **Properties**.

6 Enter the Network Key and click **OK**.

7 Click **OK** in the Wireless Network Connection Properties screen and close the screen.

If access to the internet is limited, communication may not be possible. Change the settings to limit the access according to the instructions below.

1 Click **Start** on the Windows taskbar and then click **Control Panel**. The Control Panel screen displays.

2 From the Category view, click **Network and Internet Connections** and then **Network Connections**. The Network Connections screen displays.

3 Right click Wireless Network Connections and click **Properties**. The Wireless Network Connection Properties screen displays.

4 Double click the **Advanced** tab.

5 Change the setting as needed by clicking Settings for "Windows firewall". The confirmation screen displays.

6 Click Yes. Change the settings as needed if a firewall other than the Windows firewall is used. Refer to the Help section of the firewall software you use for details.

Event:

Can't play video or audio received through the wireless LAN. Stuttering is occuring or the communication speed is slow.

Comment:

- Change the environment for receiving the signal by changing the location of this device or bringing it closer to the wireless LAN device.

  The communication speed for the wireless LAN or the communication conditions vary depending on the actual distance between the communication devices, the surrounding environment such as obstacles, the equipment configuration, the signal quality, the presence of walls, materials, and software used, etc.

- There is a possibility of access collisions in accessing the wireless LAN access point.

  Try to access again in a little while.

- Change the channel setting for the access point. The effect of band interference may disappear and this may help to improve the communication speed.

  The communication speed for IEEE802.11g may slow down automatically because IEEE802.11g retains compatibility with IEEE802.11b under mixed environments with IEEE802.11b.

  Also, channel band interference may cause a slow down in the communication speed for IEEE802.11b devices.

- Set the wireless channel for the wireless LAN access point if it is using multiple AP's or used with other wireless LAN access points. Refer to the user's manual that came with the wireless LAN access point for detailed settings.

- Make sure that a microwave is not used nearby.

  The 2.4 GHz band used by IEEE802.11b/g is a signal band shared with various devices. Using a microwave nearby when the wireless LAN is communicating may cause a decrease in communication speed and the communication distance, or interrupt the communication depending on the circumstances.

Event:

Can't communicate with other computers (Ad Hoc mode).

Comment:

If communication settings are set for use with a wireless LAN access point, communication may not be possible in Ad hoc mode. Change the communication settings according to the instructions below.

1. Click **Start** on the Windows taskbar and then click **Control Panel**. The Control Panel screen displays.
2. From the Category view, click **Network and Internet Connections**, and then **Network Connections**.
3. Right click Wireless Network Connections and click **Properties**.
4. Click the **Wireless Networks** tab.

   Click **Advanced**, select **Computer-To-Computer (ad hoc) Networks Only** in "Networks to access" and click **Close**.

5 Click **OK**.

Event:

I want to confirm a physical address (MAC address) for a built-in wireless LAN

Comment:

Check the physical address (MAC address) for the built-in wireless LAN of this device. Follow the instructions below.

1 Click **Start** on the Windows taskbar and then select **All Programs > Accessories** and click **Command Prompt**. The Command Prompt screen displays.

2 Enter "ipconfig /all" and press the **Enter** key.

3 Check the physical address (MAC address) in the Physical Address field of "Ethernet adapter Wireless Network Connection".

Cancel the network bridge if a network bridge has been created.

Event:

I want to end the wireless LAN communication.

Comment:

- Turn off the wireless LAN function.

  Refer to the Appendix A: Wireless Local AreaNetwork in this guide.

Summary

This completes the Troubleshooting Appendix. If still have unanswered questions, go to VAIO® Support Central and select a support option.

Appendix G:
Program Support

Program Support Information

Your computer may include all of the software programs listed below.

Contacts for Sony software products are listed below:

- **For users in USA**
  Web Site http://www.sony.com/pcsupport
  Telephone 888-4-SONY-PC (888-476-6972)
- **For users in Canada**
  Web Site http://www.sony.ca/support
- **For users in Latin American countries or areas**
  Web Site http://www.sony.com/lapcsupport
  Telephone 888-4-SONY-PC (888-476-6972)

For contacts about third-party software products, see the following.

Adobe® Photoshop® Elements, Photoshop® Album, Premiere®, Reader®

- **Adobe Systems Inc.**
  For users in USA and Canada:
  Web Site http://www.adobe.com/support
  Telephone 800-685-3652

America Online® (Broadband or Dial-Up)

- **America Online, Inc**.
  For users in USA and Canada
  Web Site http://www.aol.com

AOL® Instant Messenger™

- **America Online, Inc**.
  For users in USA and Canada:
  Web Site http://www.aim.com
  Click to DVD™ software

Click to DVD™ software

- **Sony Products, Inc.**

  At the touch of a button, Click to DVD software allows you to automatically burn DVDs from a digital video (DV) device. Create DVDs by capturing video content straight from a DV device or by importing video from stored files — and you can also edit the video. Create DVD photo albums and slide shows with picture files or by importing pictures from a digital still camera. What's more, you can give a professional look to your DVDs by adding chapter menus, backgrounds, and menu screens. For contacts about the software, see Program Support Information (page 128).

DVgate Plus™ software

- **Sony Electronics Inc.**

  Connect a compatible digital video camera to your computer's i.LINK® port and capture video clips and still images. Edit clips from your video, add new clips, and combine clips into new movie segments. Save your movies back to your digital video camera or in a variety of popular file formats. For contacts about the software, see Program Support Information (page 128).

Google Toolbar™

- **Google, Inc.**
  For users in USA and Canada:
  Web Site http://toolbar.google.com/help.html

Intel® PROSet, Intel® Matrix Storage Console

- Intel Corporation
  For users in USA and Canada:
  Web Site http://www.intel.com

Marvell® Wireless AP

- Marvell Wireless Solutions
  Web site http: www.marvell.com

Microsoft® Office Basic Edition, Office Professional Edition, Office Small Business Edition, 60-Day Trial Version of Microsoft® Office 2003

The Microsoft Office 2003 60-Day Trial software included with this computer system is intended for evaluation purposes only. The software has been installed and you must activate the software before you can use it. Product activation procedures will be detailed during initial launch of the software; activation requires Internet access. This software has an expiration date of 60 days from date of first use, at which time the software will operate under reduced-functionality mode, limiting end-user options and operations.

- **Microsoft Corp**.
  For users in USA and Canada:
  Web Site http://support.microsoft.com

Microsoft® Internet Explorer, Movie Maker, Media Player, Works

- **Microsoft Corp.**
  For users in USA and Canada:
  Web Site http://support.microsoft.com

MoodLogic

- **MoodLogic, Inc.**
  For users in USA and Canada:
  Web Site http://www.moodlogic.com/support
  E-mail help@moodlogic.com

Netscape® Internet Service

- **America Online, Inc.**
  For users in USA and Canada:
  Web Site http://isp.netscape.com/help
  Telephone 866-541-8233

Norton Internet Security™

- **Symantec Corporation**
  For users in USA and Canada:
  Web Site http://www.symantec.com/techsupp

Quicken® New User Edition

- **Intuit Inc.**
  For users in USA and Canada:
  Web Site http://www.intuit.com/support/quicken/

ROXIO DigitalMedia®

- **Sonic Solutions**
  For users in USA and Canada:
  Web Site http://support.sonic.com/

SonicStage® software

- **Sony Electronics Inc.**

  The SonicStage jukebox software program gives you all the tools you need to manage music on your computer. SonicStage software sports high-quality digital audio storage, a sleek player skin design, and audio CD burning capability. For contacts about the software, see Program Support Information (page 128).

SonicStage® Mastering Studio software

- **Sony Electronics Inc.**

  Use SonicStage® Mastering Studio software to record songs from analog records or cassette tapes into your computer and output them to CD-R or CD-RW discs or audio files in WAV format. For contacts about the software, see Program Support Information (page 128).

SpySubtract®

- **InterMute, Inc**.
  For users in USA and Canada:
  Web Site http://www.intermute.com/support.html

VAIO® Action Setup

- **Sony Electronics Inc.**

  VAIO Action Setup manages the settings for your computer's shortcut keys. For contacts about the software, see Program Support Information (page 128).

VAIO® Central

- **Sony Electronics Inc.**

  VAIO Central provides a central location that gathers resources to configure your VAIO computer and view your computer's configuration and specifications. For contacts about the software, see Program Support Information (page 128).

VAIO Media™ software

- **Sony Electronics Inc.**

  VAIO Media™ software brings multimedia to your network, enabling you to share music, video, and still image files between your VAIO® computers. You can set up one or more VAIO computers as "media servers," which store your multimedia files and make them available to other compatible VAIO computers on your wired or wireless network. For contacts about the software, see Program Support Information (page 128).

VAIO® Support Central

- **Sony Electronics Inc.**

  VAIO Support Central provides an easy to navigate solution to common support needs, such as VAIO Documentation, product specifications, serial number, model name, service tag information, survey, registration, etc. For contacts about the software, see Program Support Information (page 128).

VAIO® Update

- **Sony Electronics Inc.**

  The VAIO Update utility helps you keep your VAIO® computer up to date by regularly checking the Sony Online Support Web site for important software updates and information for your specific VAIO computer model. For contacts about the software, see Program Support Information (page 128).

VAIO® Wireless Utility

- **Sony Electronics Inc.**

  The VAIO Wireless Utility walks you through setting up your wireless network connection and offers useful diagnostic tests to help keep your wireless network running smoothly. For contacts about the software, see Program Support Information (page 128).

VAIO Zone™ software

- **Sony Electronics Inc.**

  VAIO Zone software provides an effortless way to browse and enjoy pictures, music, and video files on your computer, all through an elegant, next-generation interface. You can even enjoy media content stored on other VAIO® computers on your network. On VAIO computer models with a recordable DVD drive, VAIO Zone enables you to record video and slide shows of pictures to DVD. On VAIO computer models with a built-in TV tuner, VAIO Zone includes a complete personal video recorder, enabling you to record TV programs and burn them to DVD. For contacts about the software, see Program Support Information (page 128).

WinDVD® software for VAIO® computers

- **InterVideo, Inc.**
  For users in USA and Canada:
  Web site http://www.intervideo.com/jsp/Support.jsp
  Telephone 510-651-0888

Summary

This completes the Program Support Appendix. If still have unanswered questions, go to VAIO® Support Central and select a support option.